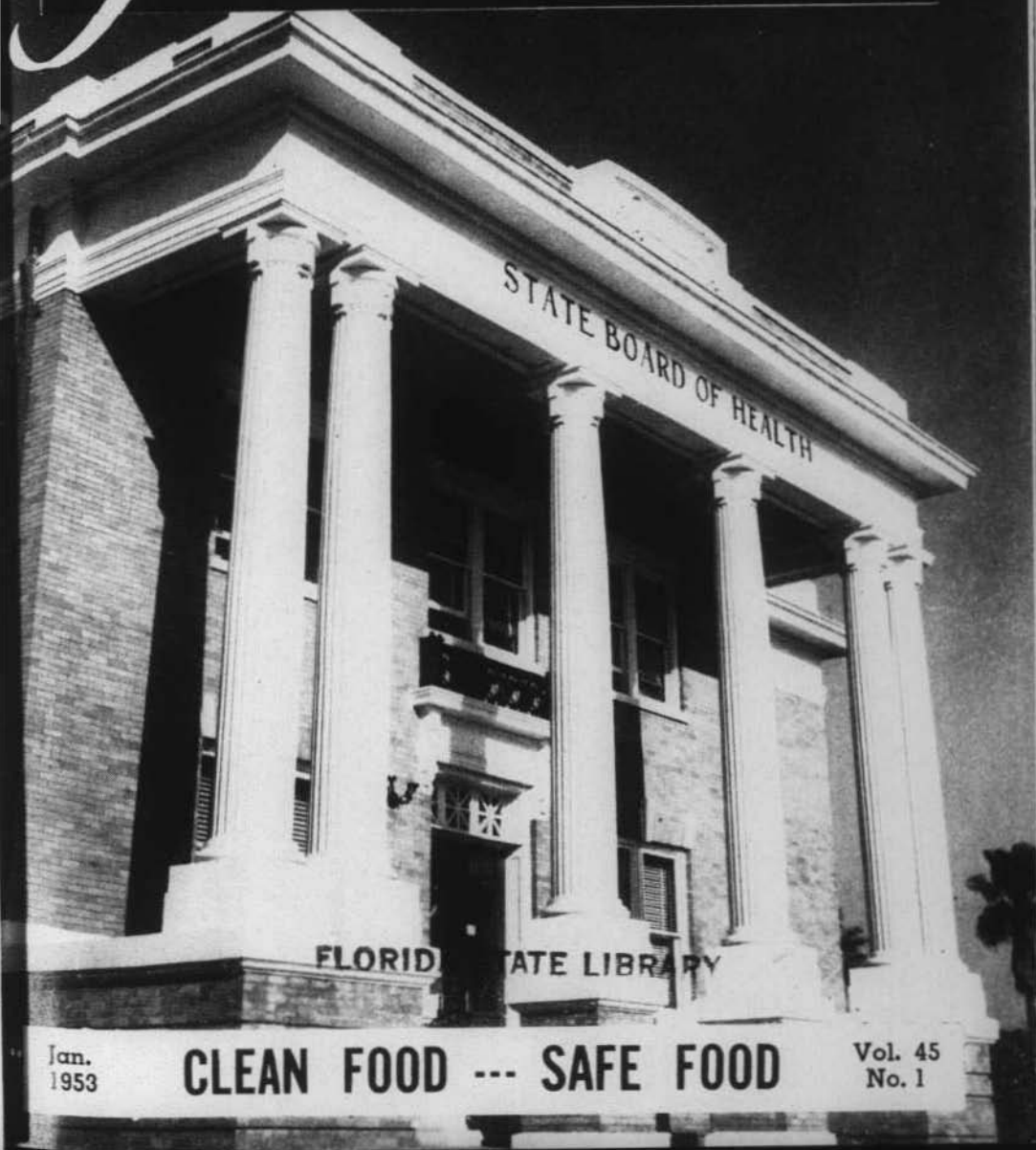


# *Florida* **HEALTH NOTES**



Jan.  
1953

**CLEAN FOOD --- SAFE FOOD**

Vol. 45  
No. 1

***Science can tell you what causes food poisoning, — but it is up to you to see that it doesn't happen to your family.***



#### FLORIDA HEALTH NOTES

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# CLEAN FOOD — SAFE FOOD

Whether you eat to live or live to eat — eating is a necessity. And in this modern age of ours many of us not only eat at home, but we like to get out and have an occasional meal in a restaurant or a hotel. Some of us, like many business people in Florida and throughout the country, have to dine out as a matter of convenience. We just haven't the time to go home.

**BUT ARE YOU ALWAYS SURE THAT THE FOOD YOU EAT IS CLEAN, FRESH — AND PREPARED IN A SANITARY MANNER?**

In spite of the fact that so many of us are familiar with eating out, whether it is to go to a drive-in for a hamburger after the show, or have a delicious meal in a place that is attractive and comfortable, it is seldom that we think how important the public eating establishment is to our health and our happiness. The preparation and service of large quantities of food in all sorts of places, has become a matter of increasing concern for public health agencies. *Food and drink can readily become easy means of spreading disease.* It is true that "tainted" food can kill you.

Many cases of food poisoning have occurred in our State. But many have never been reported. It has been *estimated* that only about 5% are brought to the attention of the State Board of Health. The chief reason for this lack of information is the fact that people eat alone, or in relatively small groups. It is only when a considerable number of persons get sick from eating a certain food that the outbreak is made known to public health officials. It is *estimated* that more than 250,000 cases of food poisoning occurred in this country last year and Florida had its share of them.

It has been said that 40% of the communicable diseases (that is diseases that can be transferred from man to man, or animal to man), may be associated with food and persons who handle food and food service equipment. If this is true, it is very important that everyone exercise great care at all times in preparing and serving food at home, in schools, in institutions, in public places, and every other place where food is handled.

## **Food Handlers Training Program**

For many years the Florida State Board of Health has worked to protect our food and to eliminate the dangers to health that are associated with it in its production, processing, transportation, preparation and service. Then in July 1947 the Board established its Foodhandlers Training Program. Since the inception of this program the Florida Restaurant Association and the Florida Hotel Commission have cooperated. In the beginning they supplied financial assistance and personnel. The objective of the program was to teach people the hazards that are involved in dispensing food and to give them proper information to protect their own health as well as the health of other people. This training program was set up for the purpose of improving the sanitation practices of people and places that dispense prepared food and drink to the public, and to give "eating-out" patrons a sense of confidence that they are being served safe food and drink whenever they eat away from home.

The result of this effort has seen a general increased consciousness in Florida of the care that should be used in the handling and preparation of food. It has seen better service provided, improved equipment installed, and better establishments constructed whether in terms of new buildings or in terms of old ones that have been remodeled to conform to the highest sanitation standards.

The success of the Food Handlers' Training Program could not have been realized without the cooperation of progressive individuals and groups in the food service industry such as restaurant associations, our universities and other state agencies, who see the value and need of better food and service for the public. The welfare of people, as well as the good of business depends upon it. In addition, civic clubs, women's organizations, the press and radio, enabled the program to function more easily throughout the State, and bring its message of health and safety in food service to workers of the food service industry. School lunch personnel, kitchen staffs of hospitals, domestics, high school home economics students, and many others, have enrolled in the training program and thus availed themselves of the opportunity to obtain basic information on how to dispense food and drink safely.

## **Lots In A Little Time**

The course of instruction offered by the Florida State Board of Health Food Handlers' Training Program consists of six basic subjects presented in a three day period for a total of six hours.



Requests are usually received from county health departments, interested institutions and other agencies for the services. Most of the counties in Florida have had at least one or two programs conducted within the past few years. Sponsorship by a civic group or industry associations is invited always, and attendance is gained principally by contact of county health department sanitarians and through publicity. The chief objective of the training program is to encourage communities in the State to establish their own permanent Food Handlers' Training Programs. At present, more than 50,000 food service people (waitresses, cooks, managers, dishwashers, etc.) have been certified by the State and ten permanent programs are currently operating.

The training of food service personnel in restaurants and institutions is essential to the dispensing of safe food and drink in public places, but it is no less important for everyone who handles food and drink at home. It can well be said the housewife is the guardian of the family's health and welfare. This is especially true where the preparation and service of food and drink are concerned. Because of this sense of family duty, we believe that she will be interested also in what the State Board of Health is attempting to do with training of commercial food workers. We are confident that she would like to know some of its teaching, so that she can apply the principles and practices in her food preparation and service at home. *The rest of this issue of HEALTH NOTES is therefore concerned with what the homemaker can do to insure giving her family clean safe food.* The following principles are the ones taught in Florida's Food Handlers' Training Program.

## ***First Things First***

First of all, it must be remembered that the public health truths and principles of safety are the same everywhere. They apply equally to our homes, as they do to industry, the community, business — all phases of our society. The only difference is in method of application. The home is the unit of our American society, and as the strength, the health, the cleanliness, of each home in our nation, so also, is the condition of our country.

There is a basic truth that everyone should know and commit to memory and it is this:

Clean people make clean places  
Dirty people make dirty places  
It is not the place that makes the people  
It is the people that make the place!

FOOD PREPARED + POOR + CARELESS = SICKNESS  
FAR IN ADVANCE REFRIGERATION HANDLING

This is the foundation of good housekeeping because it is an axiom that the kind of people make the kind of business establishments and homes we have.

Good housekeeping calls for "know-how" to do the job. If a person doesn't have what it takes to do it, they just can't keep house. For example, the maid who sweeps the dirt under the carpet is not being clean. Or, the housewife who mops around the furniture, without moving it, or going under it, is really not keeping a clean house. Or the mother who prepares the family meal without washing her hands, or goes ahead without system is not being orderly, or clean. She causes herself confusion and at the same time, may be endangering the health of her family as a result of her bad habits.

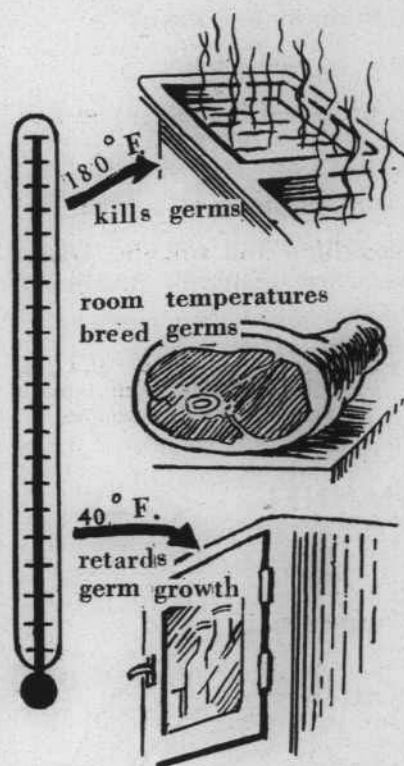
Good housekeeping involves a number of things. It calls for knowledge of diseases, and the dangers of spreading them. It demands systematic planning of the tasks that are to be accomplished. It means, that one should know what has to be clean, what to use in cleaning and how it should be done. But of all the places that need the housewife's attention, the kitchen and bathroom are the ones that have to have close watching as far as health protection is concerned.

Boils, infected hangnails or any other type of infections on the hands, arms, or face of someone working with food, can make many persons ill. Some of the infected material may be easily transferred to say, a salad, where the germs quickly multiply by the millions. It is eaten — and illness and death may result.

## Food Poisoning

It is quite necessary that every housewife realize that a significant number of communicable diseases may be associated with the handling of food and drink in the home. "Food poisoning" (or "ptomaine poisoning" as it is often incorrectly called), is rarely caused by eating food that has actually been poisoned. The majority of cases of food poisoning are caused by germs. Someone mishandling the food or working in the kitchen can manage to transfer germs to the food.

Also, milk, milk products, and water, contaminated at their sources may carry a number of dangerous diseases. The housefly, the rat, the mouse, and the roach, carry germs. When they walk over our food, it is almost a certainty that they will leave some of their germs. They eat what we eat and pass their germs on to us.

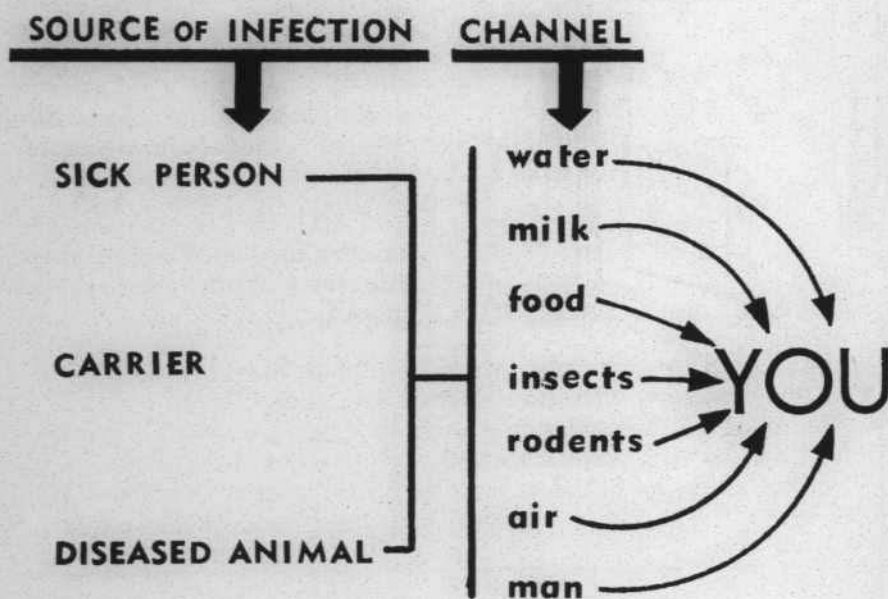


Of course we are speaking here of the bad germs, the ones that cause disease. There are good ones, too, just like there are good and bad people. We need the good ones to make some of our foods like cheese, vinegar, and sauerkraut.

**TAKE HEED!** Anyone who handles food should note these diseases and how they may be spread.

Disease	Spread By
1. <b>Food Poisoning and Food Infection:</b>	Food contaminated by unwashed hands, sores, boils, rats. Undercooked meats.
2. <b>Typhoid Fever:</b>	Contaminated water, milk, shellfish.
3. <b>Amebic dysentery:</b>	Contaminated water. Defective plumbing. Contaminated food.
4. <b>Bacillary dysentery:</b>	Dishes or silver contaminated by a person who is a carrier.* Contaminated water. Contaminated food.
5. <b>Trichinosis:</b>	Insufficiently cooked pork.
6. <b>Botulism:</b>	Improperly prepared home-canned non-acid foods.
7. <b>Septic Sorethroat Scarlet Fever:</b>	Raw milk contaminated at source.
8. <b>Diphtheria:</b>	Sneezing, coughing and spitting. Dishes and silverware contaminated by a carrier.

\* "A carrier" is a person who bears disease germs in his body and may do so without being sick. He has no recognized clinical symptoms of the disease, but he can transfer germs he carries to other people.



## **Safe Practices**

To prevent these and other diseases from occurring in the home the housewife should practice certain safeguards in her food preparation.

The kitchen should receive her first attention. It is inconsistent to prepare good food in an unsafe place. The kitchen should be kept clean at all times.

There are certain danger zones in the kitchen.

1. The sink and drainboard.
2. The cupboard under the sink.
3. Places where dishes and utensils are stored.
4. The refrigerator or ice box.
5. The baseboards, floor, and under and behind equipment.
6. The shelves and cupboards where food is kept.

Homemakers should have a daily routine of cleaning the place where the family meals are prepared. The following practices should be performed:

1. Wash dishes and utensils thoroughly — don't leave soiled ones piled in the sink.
2. Wash and disinfect the sink and drainboards.
3. Wipe off the stove.
4. Wash and bleach dish cloths, dish mops, and dish towels.
5. Empty the kitchen garbage receptacle. Wash and disinfect it.
6. Dust window sills and wipe kitchen furniture.
7. Sweep or clean the floor as needed.
8. Wash and disinfect all cleaning cloths and mops after each use.

Every week the housewife should see to it that—

1. The refrigerator is cleaned inside and out and disinfected. This includes shelves, freezing or ice compartment, and trays. (If an ice box is used, it would aid cleaning to flush the drains with boiling water, and then disinfect with  $\frac{1}{4}$  cup of bleach.)
2. Wash and disinfect food storage shelves. This is important where cereals are stored.
3. The stove is cleaned thoroughly, including the burners and storage drawers.
4. The floors are mopped or cleaned, including the corners.
5. The outside garbage can is emptied regularly, washed and disinfected.



In addition to these daily and weekly routines the entire kitchen should be cleaned periodically: walls and ceilings, furniture, windows and curtains, storage cupboards and closets, and the floor.

## Food Selection

Once the kitchen facilities are maintained in a sanitary condition, the housewife can prepare her food with reasonable confidence provided she uses certain precautions. The first care she should exercise is in the matter of her food selection. The following is a helpful guide in her purchase and storage of certain foods.

## Guide for Purchase and Storage of Certain Foods

TYPE OF FOOD	HOW TO RECOGNIZE APPROVED SOURCES	SOME DISEASES WHICH MAY BE PREVENTED	ADDITIONAL SAFETY FACTORS RECOMMENDED
Fluid milk and cream	Look for "Grade A" label; pasteurization gives added protection.	Undulant fever, tuberculosis, typhoid fever, dysentery.	Store in refrigerator until served.
Meat (beef and pork)	Federal inspection stamp or approved stamp of local inspector.	Trichinosis, tapeworm infestation, food poisoning.	Store in refrigerator; cook pork well done.
Oysters	Containers show State and certification number: example: "Fla. 140."	Typhoid, dysentery.	Store in refrigerator; leave in original container until used.
Cream pies, eclairs, etc.	Call local health department for list of approved bake shops.	Food poisoning and food infections.	Store in refrigerator.
Commercially prepared sandwiches	Wrapper should show date of sandwich preparation; check with local health department as to approval.	Food poisoning, food infections.	Use only on day prepared; filler requiring strict refrigeration not recommended.
Canned foods	Commercially processed; avoid "leakers," "springers," "puffers."	Botulism, food infection.	Store in cool place.

*Consult your local health department if in doubt as to the source of any food and drink.*

*A good rule to remember: Read the label before you buy.*

"Know your food sources" is a timely reminder to housewives. The first step in preventing food-borne disease is to be sure that food and drink are purchased from approved sources, handled and delivered in a safe manner. Many foods are packaged and put up in containers. They are labeled as to content, ingredients and quality. The buyer should always read the label. It is to the homemaker's interest to do so not only from a health standpoint, but also for the sake of protecting her pocketbook.



In the above illustration, the first label is found on government inspected meat; the second is the one to look for when buying oysters; the third is the sign that identifies safe milk. These are samples of guarantees that help the customer decide what foods to buy.

In the handling of food in the home it sometimes happens that certain foods become spoiled or damaged through carelessness or improper care. It is good for everyone in the home to be acquainted with the signs of spoilage or contamination. Sickness and fatal results can occur if such foods are served. Here are some helpful hints on how to judge if a particular food is safe.

## Some Household Tests for Food Wholesomeness

FOOD	INDICATIONS OF SPOILAGE OR CONTAMINATION	COMMENTS
Canned Food	Swelled top and bottom. Dented areas along the side seam. Abnormal odor of contents. Indications of foaming. Milkiness of liquor above food.	These indications of spoilage apply to canned vegetables, meats, fish and poultry.  Home-canned meats and vegetables should be cooked thoroughly before served.
Fish	Gills gray or greenish. Eyes sunken. Flesh is easily pulled away from bones. Finger nail indention persists in flesh. Rigidity not present.	Off-odor, can be detected quite frequently in spoiled fish.
Raw Shrimp	A pink color develops on upper fins and near the tail.  Off-odor similar to ammonia is often detectable.	Some types of shrimp are naturally pink. Cooked shrimp also develops a pink or salmon color. Both of these are wholesome if the odor is not abnormal.
Meat	Off-odor is detectable. Slimy to touch.	Beef usually spoils first on the surface. Pork usually spoils at the juncture of bone and meat in the inner portions. To test for spoiled pork it may be necessary to use a pointed knife to reach the interior of the meat. An off-odor on the knife is an indication of food spoilage.
Dressed Poultry	Stickiness appears first under the wing, at the juncture of legs and body and on the upper surface of the tail end.  Darkening of the tips of the wings sometimes indicates spoilage.	Dressed poultry should be washed thoroughly before cooking and the hands likewise should be washed after handling the poultry.

FOOD	INDICATIONS OF SPOILAGE OR CONTAMINATION	COMMENTS
Fruits and Vege- tables	<p>Evidence of a white or grayish powder indicates spray residues. These chemicals may be poisonous and should be washed off.</p> <p>The chemical may be present around the stems of fruit and at the juncture of the leaves and the stems of cabbage, cauliflower, celery, and lettuce.</p>	<p>Most of the chemicals used by growers are not dangerous; some may be. All fruits and vegetables must be washed before eaten or cooked. Cooking will not destroy the spray chemicals.</p>
Cereals	<p>Spread cereal on brown paper. If insects are present they will be readily seen; if even one is observed destroy the entire batch of cereal. Adjoining batches of cereal on the pantry shelf also should be examined and the containers in which the infested cereals were stored should be scalded and dried before being used again.</p>	<p>None of the insects that usually infest cereal are dangerous—even if accidentally consumed. However, no one wants to eat such infested food.</p>
Salads	<p>There is no specific test for salads. Chicken salad, tuna and other fish salads, non-acid salad, all types of custard-filled pastries and some types of cold cuts must be kept refrigerated at all times. All have been touched with the hands during their manufacture and may be considered slightly infected.</p>	<p>Refrigeration of these foods will keep any possible infection from increasing. Spoilage is often impossible to detect until these foods are totally spoiled. Serve salads immediately after taking from refrigerator.</p>
Frozen Foods	<p>Frozen foods, like ice cream, will spoil if kept out of the refrigerator for any great length of time. Spoilage is caused by the warming of these foods to room temperature and the resulting growth of bacteria in or on the food.</p>	<p>Cook frozen vegetables thoroughly before serving to destroy any infection that may be present.</p>
"Left- Over" Food	<p>Regardless of the type of food unless it has been refrigerated below 45° Fahrenheit it may be considered slightly infected or spoiled. The off-odor of spoiled food is not always perceptible. Don't keep "left-over" cooked food after 36 hours unless it is cooked again.</p>	<p>Bacterial spoilage of food begins as soon as it becomes warm. Refrigeration will retard this bacterial action and delay the spoilage. Cooking the food before serving, and refrigerating below 45° Fahrenheit between servings will keep food safe.</p>

# **A GOOD RULE TO FOLLOW CONCERNING FOOD IS:**

*"When in doubt — throw it out!"*

## Cleanliness Everywhere

It is important to have safe food to protect the family's health, but good food is often ruined by being prepared and served in utensils that are improperly washed. Dishes and silverware, pots and pans and cooking utensils should be perfectly clean, because disease germs can be passed on from one person to another.



To overcome this obstacle one safe method of home dishwashing is:

1. Scrape the dishes.
2. Cleanse them with a good washing powder and hot water.
3. Immerse them in, or thoroughly rinse them with boiling water.
4. Allow them to air dry, or wipe them with an absolutely clean towel.

Special attention should be given to the eating utensils of a sick person. They should be kept separated and washed alone.

These precautions reduce the possibility that dishes and utensils in the home may become the means of spreading disease.



It should always be remembered that food costs money. (As if we needed to remind you!) It is also very delicate and should be protected by proper storage and handling. Perhaps the greatest factor that contributes to preservation of food is correct refrigeration.



## Refrigeration

Good refrigeration can be accomplished only if certain rules are followed.

1. The inside of the refrigerator must be clean and free of odors.
2. The manufacturer's instructions should be followed in defrosting. (Usually when the frost gets thicker than  $\frac{1}{4}$  inch it takes more power to run the refrigerator and it does not do its job as well.)
3. Refrigeration is accomplished by the circulation of cool air around the food. Warm air rises and cool air falls in good refrigerators. Foods should not interfere with air circulation. Store them apart and do not overcrowd the box.
4. Different food requires different temperatures. However, for home refrigeration  $40^{\circ}$  F. is a good average temperature. Food should be clean and placed in the proper section.
5. Hot foods should be allowed to cool no longer than one hour before storing them in the refrigerator.
6. Left-overs should be used as quickly as possible and reheated before serving.
7. Only those foods that need refrigeration should be refrigerated. Fruits and vegetables like bananas and onions should not be refrigerated.
8. Butter and eggs should be stored away from strong odors.
9. Store foods in shallow pans rather than in deep containers.
10. Don't open the refrigerator door too often — it makes the unit work harder and wastes power.
11. The refrigerator should be arranged correctly and conveniently. It should not be placed next to a stove or heating unit.
12. The refrigerator should be checked regularly by a qualified serviceman.

**THE BIG**



**OF CORRECT  
REFRIGERATION**

① Prevents Dangerous Germ Growth

② Preserves Nutritive Food Values

③ Preserves Food Flavors

④ Saves Money

## More Suggestions

To prevent illness in the home in food preparation and service homemakers should keep in mind these guides to safety.

1. Wash fresh fruits and vegetables thoroughly under running water. They may be contaminated by poisonous insect sprays.
2. Extreme care should be exercised in the handling and preparation of high protein foods — eggs, poultry, fish, shellfish, gravies, cooked and processed meat, meat products and custards. They can cause food poisoning by careless handling.
3. Salads and ground meat should be refrigerated in shallow pans for quick cooling.
4. Frozen foods should be thawed in the refrigerator. Freezing breaks down tissues and because of it foods can be invaded by germs more readily. Foods once frozen and thawed should not be refrozen. If they can not be eaten, storage under 40° F. is recommended.
5. Hash and similar preparations should be refrigerated immediately after mixing, then heated thoroughly before serving.
6. Croquettes, salmon cakes, corn fritters, hashes and like preparations, require complete cooking. If they are only burned on the outside, germs left alive in the warm centers will multiply rapidly.
7. Stir masses of food like spaghetti so cooking will be complete.
8. Cook pork thoroughly until it is no longer red or pink.
9. Try to lessen the time between preparing and serving meals. It reduces health hazards.
10. If cold ham is to be served, refrigerate it immediately after boiling or baking. Slice just before serving.
11. Preparation tables and working surfaces should be kept clean.
12. Don't cough, sneeze, or talk over food in preparation or while it is being served. It can be contaminated with unseen droplets of saliva.
13. Foods in storage and left standing in the kitchen need to be protected from contamination from flies, dust, coughs, and sneezes. *Keep them covered.*
14. Foods should be handled as little as possible.
15. Never put a tasting spoon back into the food.

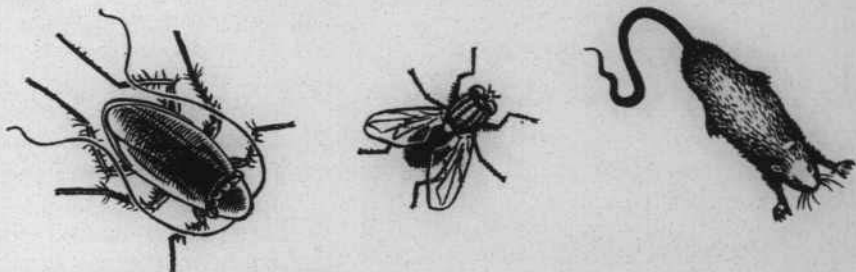


16. Keep fingers away from mouth, lips, face and soiled surfaces. The hands should always be washed before preparing food.
17. Store food off the floor.
18. Keep milk and milk products under refrigeration at all times.
19. Don't smoke while preparing food. Saliva can be dropped on food very easily, while smoking.
20. If canning is done at home pay attention to

every step in the process to insure the killing of germs. If a homemaker doesn't know how to can food she may write to the Department of Agriculture or her county agent for information.

## Little, Live Things

Food is not only contaminated by improper handling, preparation and when it is served, but also by pests that are permitted to live and breed in the home. The most common and dangerous ones are rats, mice, flies, and roaches. They walk and feed on all kinds of dirt, pick up germs on their feet and bodies and in their stomachs, then transfer these germs to food and utensils. They are found wherever food, garbage, or waste matter is present—and wherever they go they leave germs and deposit their filth.



In order to make certain that none of these pests contaminate food, eating or cooking utensils:

1. Be sure all doors are self-closing and open outward.
2. Screen all doors, windows, transoms, skylights, and similar openings with 16-mesh wire, tight-fitting and free of holes.
3. Ventilate the house well, especially the kitchen, to remove odors and smoke.
4. Keep walls, ceilings and floors clean and in good repair.
5. Dispose of all garbage, rubbish and litter promptly.
6. Keep garbage cans covered tightly; empty and wash regularly.
7. Kill flies and roaches with insect sprays or powders.
8. Leave no food out overnight.
9. Remove all crumbs and food particles at the end of each meal.
10. Keep rodents out with rat-proof construction.





Good sanitation is the best method to control pests. However, certain chemicals are recommended.

1. Five per cent DDT or pyrethrum sprays for flies.
2. Two percent chlordane spray or dust applied to cracks and crevices to kill cockroaches and ants.
3. Warfarin (compound 42) to get rid of rats and mice.

The instructions on the manufacturer's label

should be followed in using these poisons. A warning is necessary here — poisons should never be stored near food or dishes. *Poisons mean danger.* Hide them away from the reach of children. *Mark them clearly.*

## Conclusion

Recently a national magazine stated: "Today in more than 98 per cent of the homes of our country, one-half to one-third of the family income after taxes is spent in feeding the family." This fact should encourage every homemaker to learn as much as possible on how food should be protected and properly used. The Florida State Board of Health is interested in every mother, housewife, every parent, receiving the right information to safeguard their own and their children's health. And if a Food Handlers' Training Program is now operating in your county urge your local restaurant people to take advantage of its teaching so that they may learn now to protect your family from food-borne disease when you're eating out. If such a program does not exist in your area you may help to get one by arousing interest in the need for this public health service by talking to your friends, or members of a club to which you belong. Remember, your county health department stands ready to help you with all your food problems. Ask your County Health Officer!

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1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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ST. JOHNS COUNTY

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*Here is a good rule to follow if you  
suspect food is tainted or spoiled:*

**WHEN IN DOUBT ??  
THROW IT OUT !!**

*Trying to save a few pennies a day  
on food may cost you dollars in  
doctor bills.*

# Florida

## HEALTH NOTES



February  
1953

### NURSING HOMES

Vol. 45  
No. 2



# NURSING HOMES

The large two-story former dwelling house looked neat enough from the outside, with well-tended lawns and hedges, and oleanders blooming brilliantly in the flower beds. The sign, "Sunshine Haven Nursing Home," was neatly lettered and not too fancy. The elderly couple who stood hesitantly on the sidewalk, however, had a number of unanswered questions. Newly arrived in Florida, they believed that a boarding or nursing home might be the answer to their retirement housing problem.

The husband, nearing seventy, knew that his wife, somewhat younger, had never fully recovered from a bad fall which had broken her hip two years ago. She might need some nursing care, and a doctor now and then. So a "nursing home" looked attractive to him.

In her mind there were other thoughts. How often do they change the sheets? Are the beds comfortable? What are the rates? What accommodations are there for married couples? What about the food? Could her husband's New England stomach stand up under the kind of cooking he would receive compared with the dishes with which she had been coddling him for years? Would the people who ran the place like old folks?

The scene above is repeated many times in Florida each year as more and more retired people respond to the lure of the Sunshine State to spend their "golden years" as senior citizens in a state famous for its climate and year-round physical comfort. For Florida has been widely advertised as the nation's year-round playground — a place where business and industry can thrive and prosper — and especially where people getting along in years can come to spend their last days in comfortable retirement. Thousands of oldsters have responded to the lure of Florida. Many of

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## FLORIDA HEALTH NOTES

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them seeking the fabled "Fountain of Youth" which drew Ponce de Leon to the State hundreds of years ago, are doing well. Some, in ill health, have regained part of the vigor of their younger years and have gone back to work on a full or part-time basis.

Florida is a good place to stay. And Senior Citizens in retirement can be comfortable enough — if they have money enough to buy what comforts and services they may need or want. But for persons on a definitely limited income or no income at all, the same old economic problems will face them here that worried them back home.

## Pleasant Spot or?

What assurances have these elderly people, some of them in the uncertain health that often develops with advancing age, that they will be well treated in Florida? Have they any assurance of kind and considerate treatment that will brighten and lengthen their last years? Can they depend upon adequate food and lodging in return for the money they pay? What are the recreational opportunities? Or the chances that they will be doomed to drag out their lives in a tedious day-to-day existence in a dirty unkempt nursing home?

Chances are they will find the pleasant place they seek. For there are many boarding and nursing homes in Florida designed for their particular needs: clean, well-operated, providing a congenial atmosphere among people of their own age group and interests. We want to mention, however, one hazard if they fall ill or are unable to care for themselves and are living on a limited income. Florida has no laws on its statute books at present to safeguard the health, safety and comfort of those who take up





**residence in the hundreds of boarding and nursing homes operated primarily for elderly persons.** Furthermore there are no laws to provide adequate financial safeguards for those who invest their often-meager life savings in the so-called pre-paid life care plans that are beginning to spring up in Florida and elsewhere.

First, let it be said that steps are being taken to provide such protective laws. When the Florida State Legislature convenes this Spring for the 1953 session, that body will find awaiting its attention two measures:

1. A proposed enabling act to empower the State Board of Health to draft rules and regulations for the operation of nursing and boarding homes to assure the occupants at least a minimum of protection from the standpoint of health and safety.

2. A proposed law which would place those offering pre-paid life care plans (which could include care in a nursing home) under the supervision of the State Insurance Commissioner. Those proposing to sell such life care plans would have to submit to personal and financial investigation, and would be required to post bond to assure their contracts with clients.

The great majority of people operating such homes in Florida are doing a highly creditable job in supplying food and lodging to many people on limited incomes. These proposed laws are aimed primarily at the few "chiselers" who ask as much money as they dare and then supply as little in the way of service as they can get away with.

Many minds have given thought to the problem, many talents have been enlisted in devising the proposed regulations, both from the health and safety viewpoint and from the financial aspects as well.

From the health and safety angle, the problem is admittedly a difficult one. In devising regulations for the operation of boarding homes, it would be impractical, for instance, to specify tiled bathrooms and other first-class accommodations for a man or woman who may be able to pay only \$50 per month or less, with food prices what they are today. To set up rules and regulations that would be too harsh or arbitrary would result in closing down many homes run by capable, well-intentioned persons who are motivated by a desire to supply a service to older people, rather than to reap a big monthly income.

Yet there are some homes operating on a commercial basis **which should be forced to close, or to mend their ways.**

## There Is No Law

Quite a number of people are under the impression that Florida DOES have such laws to protect its older residents in boarding homes. During the past two years scores of letters from nearly half the states in the nation have come to the Florida State Board of Health requesting information concerning the rules and regulations that must be followed in the operation of boarding and nursing homes. The State Board of Health, in turn, has replied "with regret" that no such laws exist, that the State Board of Health has no specific regulatory powers over such institutions. But the return letters add with a note of hope that such laws providing rules and regulations will await the next session of the State Legislature.

Occasionally a citizen will discover with surprise and shock that some of the boarding and nursing homes are being operated on a questionable basis with dirt and lack of suitable care as prime liabilities. Such a letter came the other day, sizzling with indignation.

"I understand state examiners check on the health of employees of beauty parlors, barber shops, etc., as well as the buildings of such public places," the letter began.

"Why is it some awful nursing homes are not checked on?"

The writer gave the name and address of a nursing home located near one of central Florida's principal cities. It was described as "a miniature 'snake pit' instead of a nursing home. Surely the above nursing home was not investigated in a long while," the writer continued.

"The kitchen is small and very poorly lighted. The kerosene kitchen stove has smoked the little room until it looks like a tramps' hideout instead of a location for the preparation of what should be appetizing foods. Two of the buildings are presentable . . . (but) . . . three of the building sections look like chicken houses and have no running water. All the buildings have electric lights but the bulbs are so small you need a flashlight to find them.

"The so-called 'nurses' are poorly paid. One nurse with two and a half years of nurses' training and several years of experience was expected to be on duty 14½ hours per night at a salary of \$20 a week, and a day off every other week if the two girls on duty wanted to relieve each other. It was hard enough for two girls to try to have the patients clean for the day shift when they

came on. One morning about half of the patients were soiled with urine or body discharge and there were no sheets to change the beds. The patients often lay all night in fouled beds.

"If you would only send several investigators around without any previous warning," the letter concluded, "you will see why I write this letter."

There was no way to reply to the letter. It was signed merely 'A Citizen in the Interest of the Public,' and gave no address. It didn't matter much. There was little or no answer to offer.



## Didn't Anybody Ever Try?

Why doesn't Florida have laws to regulate nursing and boarding homes? Efforts have been made for several years to draft suitable legislation for the purpose. At the 1951 session of the State Legislature a bill was introduced which would have given the State Board of Health authority to set up the necessary regulations, prescribe the minimum standards and enforce the law. But there was considerable discussion on the proposed measure. Some wanted maternity homes, day nurseries and other facilities included in the act. While the debate continued, time ran out and the bill was smothered in the closing rush of last-minute legislation. During the past two years, however, the bill has been revised and sponsors are hopeful of its passage in its present form.

In an explanation of the bill for inspection and licensure of nursing homes and homes for the aged, the State Board of Health declares:

"Such inspection and licensure is necessary after July 1, 1953,<sup>23</sup> because the State Department of Public Welfare (formerly known

as the State Welfare Board), advises that Federal Funds cannot be used for old age assistance after that date where the recipient is cared for in an institution not licensed by a state agency. Aside from this, there is an obvious need to improve the standards of such homes for the aged and the chronically ill.

"The bill has been prepared in cooperation with the State Department of Public Welfare, the State Improvement Commission, the Governor's Committee on Retirement and the Attorney General's office. It is based on a bill proposed by a group of interested church women in Jacksonville. It provides for an appropriation of \$50,000 in order to carry out the purposes of the bill."

The bill would allow the State Board of Health to prepare and enforce regulations designed to protect the health and safety of residents of nursing homes and homes for the aged. It would also fix responsibility and determine the extent of the inspection, provide for the legal entry for inspection purposes, empower the State Board of Health to issue licenses to such institutions, and set up penalties for violation of regulations.

Here is what the State Board of Health proposes to do in setting up minimum standards under the enabling act. We quote from the proposed legislative bill:

"1. The board shall prescribe and publish minimum standards in relation to:

"(a) Location and construction of the home, including plumbing, heating, lighting, ventilation and other housing conditions, which shall insure the health, safety and comfort of residents and protection from fire hazard;

"(b) Number and qualification of all personnel, including management and nursing personnel, having responsibility for any part of the care given to residents;

"(c) All sanitary conditions within the nursing home and its surroundings, including water supply, sewage disposal, food handling and general hygiene, which shall ensure the health and comfort of the residents;

"(d) Diet related to the needs of each resident and based upon good nutritional practice and on recommendation which may be made by the physician attending the resident;



"(e) Equipment essential to the health and welfare of the residents.

"2. The board may adopt and enforce rules and regulations relating to the operation and conduct of nursing homes and the care, treatment and maintenance of the residents thereof as it shall deem necessary for an effective administration of this act."

The proposed bill defines "nursing home" or "home" as a "private home, institution, building, residence or other place, whether operated for profit or not, including those places operated by a county or municipality, which undertakes through its ownership or management to provide for a period exceeding 24 hours, maintenance, personal care or nursing for three or more persons not related by blood or marriage to the operator, who by reason of illness or physical infirmity or advanced age are unable to care for themselves."

Homes or institutions exempt from the act include those operated by state or federal government agencies, child welfare agencies, maternity or lying-in homes requiring state license, and hospitals. Institutions operated by religious groups which have "faith healing" as a part of their creed would be exempt from medical provisions of the bill, but would have to meet other specifications.

After July 1, 1953, it would be unlawful, the bill proposes, to operate or maintain a nursing home without first obtaining license from the State Board of Health. Homes which are already in operation on that date would be given "a reasonable time" (not to exceed one year) to comply with the rules and regulations and minimum standards to be prepared by the board.

Groups who have worked on the bill favor such a general "enabling act" so that the State Board of Health would have a little leeway in designing rules and regulations, and minimum standards which would be in keeping with economic conditions. To close down any existing homes without giving operators a chance to make necessary improvements and changes in operating policy would create chaos in the personal lives of their occupants, who would be hard-put to find another place which would accommodate them on the often-limited amount of money they are able to pay for care and shelter. For there are nursing homes which accept residents for the amount of their old-age assistance grant — usually around \$50.00.



## Safeguards Against Fraud

And what safeguards are being designed to protect older people who invest their life savings in the so-called pre-paid life care plans? The office of the State Insurance Commissioner is interested in that angle. As this is written (December, 1952) the State Attorney General's office is working with the State Insurance Commissioner to draft proposed legislation designed for the financial protection of old people who have invested in such plans. Generally, the bill will propose that any person, business enterprise or corporation who offers such plans for sale shall be subjected to investigation by the insurance commissioner to determine ability to carry through with the contracts, and shall be required to post bond so that if in any event they default on their contracts, clients will be assured of the return of at least part of their investment.

Both proposed legislative bills have the support of the Citizens Committee on Retirement in Florida. This committee, appointed by Governor Fuller Warren two years ago, has been investigating the opportunities Florida offers to persons wanting to spend the rest of their "golden years" in this state.

At their final session in Jacksonville last November, the committee's second annual report noted that:

"Because problems of illness and disability requiring care and supervision occur frequently in the older age groups, and because such care and supervision must often be provided by nursing and rest homes, it is recommended that the 1953 Florida Legislature adopt a bill defining, licensing and regulating homes for the maintenance, care and nursing of persons who are ill, physically infirm, or of advanced age, and of homes maintained as rest homes."

The committee also proposed that the State Board of Health assume this function.

On the need for financial safeguards for older people investing their savings in pre-paid life-care plans, the committee had this to say:

"There is evidence that many persons in their later years are entering into contracts by which they often invest their life savings in return for the promise of a home and care for the remainder of their life, and this trend may be expected to increase in states which attract older citizens from other regions. It is therefore recommended that the 1953 Legislature enact legislation pro-

viding that any home or institution which proposes to enter into contracts for the care of persons during the remainder of their lives, whether or not operated for profit, and whether or not operated under the auspices of a religious organization, shall first be required to prove its financial responsibility and the actuarial soundness of its life-care plan to the satisfaction of the Insurance Commissioner of the State of Florida."

We want to talk more about the work of the Citizens Committee on Retirement in Florida, but first we would like to review some of the problems faced by the State Department of Public Welfare. For it was the crying need of this organization to have some agency supervise nursing homes so that welfare clients could still continue to draw the benefits that paid the bills for their occupancy in these homes, that added new urgency to the need for such legislation.

The Director of the State Department of Public Welfare reported to the State Health Officer last November that of the 66,938 persons receiving "old age assistance" in September, 1952, 2,008 were housed in nursing and boarding homes and dependent upon their assistance checks to pay the bill. In addition, 117 persons receiving assistance under "aid to the blind" provision of the welfare program were residing in such homes.

These persons were receiving a monthly grant averaging \$48 for old age recipients and \$48.43 for aid to the blind, or a total monthly grant of \$102,050. Approximately 60 per cent of this sum came from Federal funds which supplement the state's contribution for welfare aid. That Federal grant, the director cautioned, would be jeopardized if nursing homes were not under supervision of some state agency by July 1, 1953.

## Nothing New

The State Department of Public Welfare has known for several years that some of the nursing homes and homes for the aged were offering substandard care for the money paid. Says a district welfare case worker in a report on conditions in Pinellas County:

"Whenever a complaint is received, we talk this over immediately with the manager of the home in question, and interview the patients we know there. We are not charged with guardianship of the persons living there, and therefore can take no action regarding the removal of the individual if the home does not meet minimum standards for cleanliness, care, proper food, etc. We can

advise the individual of other places they might stay and help them with such arrangements, if they so desire. Where there are relatives, we can advise them of our findings, but the final decision is, of course, up to the individual and his family."

Some welfare recipients actually seem to thrive in homes welfare workers do not consider exactly suitable. The report continues:

"There are persons who receive old age assistance who make living arrangements in homes that we could not recommend; however, we are not able to restrict use of the grant (money). Therefore, we can only advise the individual. But in some cases he is satisfied with a less demanding environment because it more closely resembles his own."

Here, too, arises a delicate question which will require some thought. Aside from the physical and financial factors, there is another vital point to be considered. The old fellow seeking an environment in which he could feel comfortable would be lost in an "institutionalized" atmosphere such as some social workers might consider more suitable. For the psychological factor has an important bearing on mental health and the desire to continue living. A man who is accustomed, for instance, to pulling off his shoes to ease his aching bunions (women have them, too!) would soon grow irritable in a house where such practice drew disapproval of other residents, and would seek to go elsewhere. But where would he go if such homes were forced to follow too rigid a pattern?

To put it briefly, will he find the atmosphere of kindness and comradeship which will make existence seem worthwhile? It depends upon the inherent kindness and goodwill of the people with whom he is staying, as well as the consideration and accommodations of the home and its staff.

## **The Citizens Committee**

The Citizens Committee on Retirement in Florida (also known as the Governor's Committee), came into existence in October, 1950 through proclamation of Governor Warren, as an advisory body. Governor Warren, in naming the committee, pointed out that since Florida has long been the vacation and retirement goal of an increasing number of citizens from other states, and because Social Security and industrial pension plans are making it possible for more older people to change their place of residence, large numbers of these people may be expected to come to Florida.

During the two years of its existence, the committee met formally 10 times in various parts of the state, serving without pay and defraying their own expenses. In addition, various sub-committees have held a number of special meetings of their own. They were named and have served as advisors to the Governor, the State Improvement Commission and the public.

The second and last annual report of the present committee points out that Florida is showing a startling increase in its older population, indicating that the trend of retirement to the Sunshine State has tremendous significance.

"In 1950," the report states, "there were 12,322,000 persons over 65 years of age in the United States. These people were not distributed equally among all the states. Nor were they in direct proportion to the population of the individual states. Florida, for example, ranked 20th among the states in total population, but her 237,000 old people placed the state in 15th place in that classification....

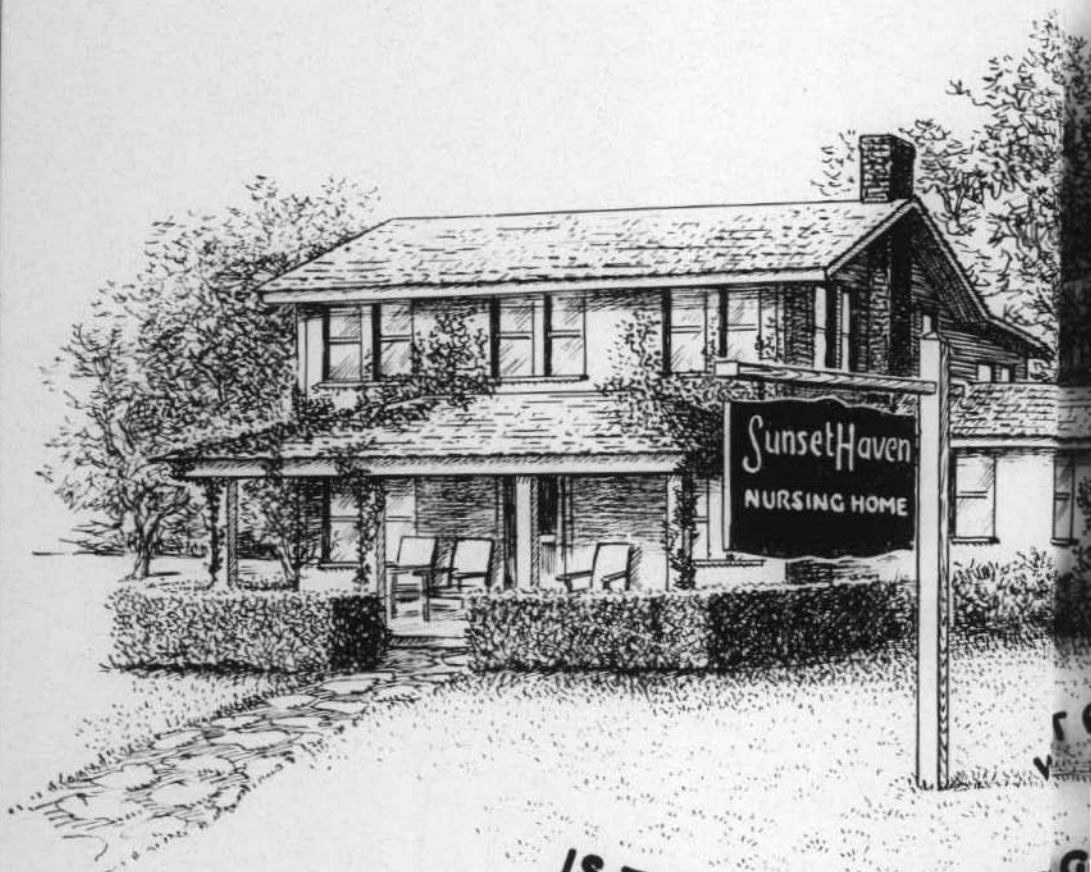
"The problem as it faces Florida has become strikingly evident in recent decades. In 1940, the proportion of aged persons in Florida was 6.9 per cent. By 1950, only 10 years later, Florida exceeded the national average of 8.2 with a percentage of 8.6.

"That in itself does not seem startling until one considers that in 1900, less than three per cent of Florida's population fell into this age group, compared with 4.1 per cent for the nation. The significant fact is that the percentage of people over 65 in Florida has increased much faster than in the United States as a whole. That increase represents a change, in Florida, from an older population of 14,000 in 1900 to 237,474 in 1950. While the older people were increasing in the United States by 300 per cent during these decades, they were increasing 1,600 per cent in Florida. From 1940 to 1950 Florida's older population jumped 81 per cent. Only Arizona, with an 85 per cent increase, exceeded Florida's population growth among older people during the decade."

The committee, in its statement of policies and objectives, touches on the need for suitable accommodations. It also warns that sufficient income for retirement purposes is necessary. Says the committee report:

"Life in retirement in Florida under favorable circumstances can be a most pleasant experience. The incoming retiree should, of course, have sufficient income to provide what he regards as a decent standard of living. One essential is comfortable housing





IS THE DRINKING WATER

HOW OFTEN DOES

IS A NURSE AVAILABLE?

WHAT ABOUT A





IS IT CLEAN.?

HOW ABOUT THE FOOD.?

ABOUT THE STAFF.?

DOES IT HAVE A PARLOR.?

DO THEY CHANGE THE SHEETS.?

ARE THE RATES REASONABLE.?

IS THE HOME LICENSED.?





within his means. . . . In some cases he may be able to secure part-time employment to supplement his income or to provide the kind of activities that make for satisfaction with life. The committee clearly recognizes, however, that the presence of a large number of retired people with inadequate incomes might lead to an increased welfare burden as well as unhappiness among retired people."

When any old person decides he would like to move to Florida from a far-away state he should be urged to consider the fact that perhaps he is

breaking away from the friends and the familiar surroundings of a life time. He should also be reminded that his relatives will be far away in case of illness or disability. These factors are sometimes forgotten in the desire to seek a more pleasant clime.

## **Some Other Suggestions**

The Committee made a number of other recommendations in addition to pointing out the need for legislation to protect the health and safety of those living in boarding and nursing homes and to provide financial safeguards on the prepaid life-care plans.

The First (of 13) recommendations declares that:

"We believe that the committee has begun work which is of vital importance to the welfare of the State of Florida. We feel that intelligent planning by such an advisory body can guard against increased tax burdens for the care of the aged by the encouragement of private enterprise to provide suitable facilities. It is recommended, therefore, that the incoming governor carefully consider the appointment of a similar advisory committee to continue the work that is now under way.

"If this action is taken, it is recommended that the membership of the Citizens Committee be increased and broadened so as to insure adequate representation of the varied interests of the state by the appointment, in addition to segments of the population now participating, of members from architecture, the church, industry, law, the legislature, medicine, service industries and women's organizations."

In its statement of policy contained in the annual report, the committee makes a pertinent statement that might be quoted here on prospective retirees who expect "too much from too little" in Florida. States the committee:

"Surveys show that tens of thousands of Americans who find it possible to retire, want to make Florida their home. We think this growth of population can be mutually profitable to the new citizens and to the State of Florida — if we face the grim realities of today's price levels and reject any romantic notions that newcomers can live here for only a few dollars a month. Florida must continue to be a mecca of sunshine and comfort for those who want to spend their golden years in the South. But it will become a nightmare of poverty if thousands come here expecting too much from too little in the way of fixed income . . ."

The committee's precautionary warning is particularly pertinent to the State Board of Health and to its county health departments which offer local public health services. The big question is this: what can you do about old people who have little or no money, cannot care for themselves, and who must have some place to go? Occasionally a health department can move in when "sanitary nuisance" complaints about a nursing home are made. But aside from making the operators clean up the specific sanitary nuisances, there is little that any county health department can do in assuring suitable food, reasonable bed space, periodic changes of bed linens and other things that make life at least tolerable for residents of boarding and nursing homes.

A number of county health departments have struggled with the problem of poorly-run nursing and boarding homes, but in the absence of any law fixing responsibility and determining extent of inspections, the local public health agencies have been able to accomplish little or nothing. There are some few localities with local regulations, rarely enforced, because no machinery has been set up for that purpose.

The Hillsborough County Health Department with headquarters in Tampa has devised a working plan which has been helpful

there. In the course of a year the County Health Department will receive queries from old people or their relatives inquiring about suitable accommodations for retired or infirm persons in the Tampa area. Representatives of the health department in turn will approach the operator of a boarding or nursing home, inform them of a prospective client, and offer to recommend that particular home — if the health department is allowed to conduct an inspection to determine if the quarters are suitable.

"We have had some success with that method of approach," says the director of the Hillsborough County Health Department. "We have argued some of our boarding and nursing home operators in to making necessary and reasonable improvements in the type of service they offer. We have some homes in the county catering to retired people who will offer food and shelter for as little as \$50, and the client will get his money's worth. We regret to say, however, that some homes charge substantially more than that without providing proper quarters and service. There is not much that we can do except to tell them that we cannot recommend their home to prospective clients." It should be recognized however, that not much in the way of board and lodging can be furnished for \$50.00 a month. This is the big problem in enforcing the law.

Meanwhile the Hillsborough County Health Department's Health Advisory Board considers the situation so serious in that area that it is drafting proposed legislation which would set up a county-wide control program, in the event legislation for a state-wide control program appears to be in danger of failure to pass.

## **The Tampa Meeting**

The problem of supervision of nursing homes in Hillsborough County has been a sore subject for several years. It came to a head in February, 1951, when a committee meeting was held to discuss proposed standards for boarding, nursing and convalescent homes. The director of the County Health Department told the committee that some homes there offered good basic care for a minimum fee, but added that some homes were operated in a "filthy manner."

He added that he had talked to a number of boarding and nursing home operators who were seeking to set reasonable standards and added that most of them would "welcome inspection and supervision, and would be proud to display a license indicating they had the approval of some supervising agency."

Among those at the Tampa meeting were the director of the Florida State Board of Health's Bureau of Narcotics. When asked if he had seen any need for supervision of nursing homes, he said he certainly had, and added that "practically every evil in a police way" had been encountered in nursing homes, including criminal abortion, dope peddling, baby selling, blackmail and practicing medicine without a license.

## Other Cities, States Have Laws

Other cities and states have wrestled with this same problem. Some are ahead of Florida, others are feeling their way as Florida is doing now to determine just what sort of legislation will serve the best purpose.

Let's talk about one city — Baltimore — two states, Illinois and California.

There are other areas which are adequately meeting this problem but for purposes of comparison these three will do.

In Baltimore, those who operate — or propose to operate — a nursing home, must conform both to city ordinance and state law. A report of a committee on nursing homes which was appointed by Baltimore's present Mayor to "consider and report back" on conditions found in nursing homes there outlines the steps for operating or setting up such a facility.

"Prior to the opening of a nursing home in Baltimore City, the proprietor or responsible person must secure an ordinance from the Baltimore City Council authorizing such a home," the committee report states.

"The prospective nursing home operator files with the mayor and Council a petition to have an ordinance enacted authorizing the establish-





ment of a nursing home at the specified location. The application is referred to the Baltimore City Bureau of Buildings for recommendations. Representatives of the Bureau of Buildings make a survey of the property following which the Bureau's recommendations are referred to the Mayor and Council. It has been customary for the council to enact the ordinance authorizing the establishment of the nursing home, including in the ordinance stipulations that the recommendations made by the Bureau of Buildings must be met."

In addition to conforming to rules and regulations of the City of Baltimore, the operator also must meet the standards laid down by the Maryland State Department of Health. An act of the Maryland General Assembly passed in 1945 gives to the State Department of Health the responsibility of licensing hospitals and nursing homes. This imposes the responsibility upon the State Department of Health to grant a license before a nursing home can open and the responsibility of supervising such home and the standards prevailing in such homes on a continuing basis.

The State law is administered by the state health department through its Division of Medical Services. The Maryland health department employs three full-time public health nurses under the title of hospital advisors and who assume the responsibility of collecting the original information upon which the license is granted or rejected and for the continuous inspection of nursing homes and similar facilities. Other members of the Maryland Health Department staff are called upon as needed. They include the divisions of sanitary engineering, food control, drug control, engineers, dieticians and other professional personnel. Before any license is granted to a nursing home in the City of Baltimore an inspection also is made at the state health department's request by the city fire department, the city bureau of buildings and the city health department to determine the standards of the home in relation to fire hazards, and the general structural building.

Licenses are issued according to the regulations set up by the State Department of Health upon recommendation by an advisory board of seven people, which is specifically provided for in the 1945 state law.

"In considering the whole matter of nursing homes," the report continues, "it must be borne in mind that these agencies perform an exceedingly valuable function to the community and that responsible persons who wish to go into the business of open-

Not long ago someone inquired for information concerning the qualifications necessary for operating a nursing home in Florida. A man who has had considerable experience in hospital construction and administration replied: "You might have a sick husband, a loving heart — or just want to make a little money. No other reason or qualifications are necessary in this state today."

ing nursing homes which fully comply with standards should be encouraged.

"The nursing homes with acceptable standards also are vitally interested in improving standards of care provided and have formed their own state organization known as the Maryland Association of Registered Nursing Homes."

In pointing out the need for more nursing homes, the report states:

"In spite of the shortcomings of the homes, it is a fact that these homes do provide protection and custodial care for many persons and undoubtedly the inmates, in most instances, are much better off than they would be under the conditions of housing, etc., they had at the time they entered the home. It is also a fact that while public hospital facilities for chronically ill aging persons are being expanded, there is not now, nor will there be in the foreseeable future, sufficient beds in such institutions to provide for the number of persons needing care."

Let us see how the State of Illinois has met the challenge. In an article published in the September, 1952, issue of Public Health Reports, a magazine issued by the Federal Security Agency, Registered Nurses Margaret Ranck and R. R. Cunningham tell the story of progress in Illinois.

In that state public interest concerning boarding homes and their development became so great that by 1945 the Illinois State Legislature approved an act charging the Illinois Department of Public Health with responsibility for licensing and supervising nursing homes in that state.

"The objective in licensing," the writers state, "is to assure good personal care in a pleasant, safe environment where individual dignity is respected and recognized."

Under the legislative act, any establishment housing three or more persons who "by reason of illness or physical infirmity are unable to care properly for themselves," must be licensed on the basis of minimum standards of sanitation, hygiene, diet and number and type of personnel. The State Department of Public Health is responsible for establishing minimum standards for licensure.

"Since many of the requirements of the nursing home act involve sanitation and building, its administration first was delegated to the state health department's division of Sanitary Engineering. After four years' experience in administering the act, program emphasis had changed to **considering the service to residents in the building as of prime importance**. So the job of administration was transferred to the bureau of hospitals. . . .

"Although the statute places the responsibility for the administration of the program on a state level, it has been the policy of the small, central staff to serve in a consultant capacity. Much of its direct counseling service is provided through a cooperative arrangement with regional, county and city health departments."

## Here's Another

That's about all we have space for on the Illinois program. A reading of the complete article is recommended to those who have enough interest in the problem. Let's turn now for a quick look at California, a far Western state whose population growth (among the older age group seeking to retire) parallels Florida.

California's Health, a semi-monthly publication of the State Department of Public Health, carries an article in its March 15, 1952, issue on nursing, convalescent and rest homes in that state.

California makes a distinction between these institutions and institutions usually referred to as "boarding homes for the aged," with the latter being under the supervision of the State Department of Social Welfare. The author of the article, Bernice Hotchkiss, R.N., of the state public health department, does note, however, that "while nursing, convalescent or rest homes are not for aged persons exclusively, most of the patients found in these homes are in the upper age bracket and most homes are designed to accommodate the elderly patient."

California passed a Hospital licensing act in 1945, which included nursing, convalescent and rest homes. California has seen fit to bar residence in these institutions to "alcoholics, drug ad-

dicts, persons with mental disease and persons with communicable diseases, including contagious tuberculosis." (Florida's nursing home operators have said that such a provision also would be helpful to them to keep from being "pressured" into accepting undesirable patients of this nature.)

When the licensing act went into effect in California in 1946, all institutions subject to its control were granted licenses upon submission of applications.

"Facilities thus automatically licensed," the article notes, "obviously included many which did not meet the minimum requirements set by the State Department of Public Health. The Bureau of Hospitals, which is administratively responsible for the licensing program, has assumed the task of bringing these facilities up to the minimum requirements. Specific deficiencies which most often existed included unqualified operators, unacceptable physical facilities, lack of patient and personnel safety (particularly fire safety), inadequate personnel, and inferior quality of patient care."

The Bureau of Hospitals went to work and by early 1952 was able to report that "many of the earlier deficiencies have been overcome. In some instances nursing homes have been forced to discontinue as such by inability to overcome the obstacles to licensure. In others, extensive physical alterations enabled them to meet requirements. Installations of additional equipment also have improved the homes. As a result, the problems recognized by the Department of Public Health in this field are no longer of the same magnitude as a few years ago."

## **Let the Buyer Beware**

This part of Health Notes is written primarily for older persons or their relatives who may be seeking a suitable nursing or boarding home in Florida. What are the things to look for in a well-run nursing home? First, the building must be suitable, with sufficient sanitary facilities, good beds with periodic changes of linen, some arrangement for nursing or medical care if that is necessary or should become so. Check on food, trained personnel. In fact, it is wise to "visit" for a few weeks if possible to determine living conditions, recreational opportunities, the value received in terms of money paid.

Florida's county health departments can be a big help in advising prospective residents. These local health agencies (or-



ganized in all counties except St. Johns as this is written) generally have a fair idea where good accommodations may be found. And above all, use caution in investing in any plan that calls for a lump-sum payment in return for life-care.

## **Some Things to Look For**

A pamphlet prepared by the Central Agency for Chronically Ill in Milwaukee, Wisconsin, makes some important suggestions.

Entitled "Hints for Planning and Operating a Nursing Home," the pamphlet is a valuable source of information, both for those who plan to set up or are already operating a nursing home, and at the same time provides some tips on what to look for from the prospective residents' point of view.

"Do you," the pamphlet leads off, "enjoy the responsibility of looking after sick and elderly people? Do you know how to give the sick good care, because you are a registered professional nurse or a licensed practical nurse?"

"Are you patient and easy to get along with? Are you in good health and able to stand long hours of work in an emergency? Are you a good business woman? Can you purchase and prepare food for quantity cooking; plan meals which meet approved standards of nutrition; prepare special diets; pinch-hit for the cook if she leaves unexpectedly?"

The article also asks if the prospective nursing home operator has sufficient capital to provide suitable quarters and carry the project until enough residents are acquired to make it a paying proposition.

"If your answer to these questions is 'yes,' the foreword states, 'you probably are qualified to operate a good nursing home.'"

The article suggested minimum standards for housing and equipment and warns that "old mansions may be elegant but they are often unsuitable and costly to remodel." It points out the need for good housekeeping practices, and suggests that prospective nursing home operators "plan a small sitting room on each floor where patients may receive relatives, friends, the lawyer, the priest or the minister in privacy."

This latter suggestion is one of several designed to create a home-like atmosphere and a touch of kindness to what could so easily become an "institutional" atmosphere. Other suggestions



include the provision for a game room where patients can play games, listen to the radio, look at television, sew or do other hand-work — "occupational therapy often is recommended by physicians."

Other suggestions tending to create a more home-like atmosphere include references to diet:

"Remember the importance of serving the 'seven basic foods' daily. . . . Consider the patients with dentures in food preparation. Hard food is difficult to chew. . . . Food preferences of patients are important. Lifelong food habits are not easily changed. . . ."

And here is another significant touch:

"Arrange for visits by priests, rabbis and ministers to those who desire it. Plan special weekly services if enough patients wish them. Observance of religious holidays will please many patients."

In preparing accommodations for older people, we have come a long way from the cordially-destested "county poor farm." Pension plans in business and industry, together with social security and other welfare benefits are helping to eliminate the "poor farm" population and may in time erase these institutions altogether.

Because of this trend — or possibly along with it — many business, industrial, fraternal, religious and labor union groups are becoming interested in establishing homes for their members in Florida. A few notable examples include Moose Haven at Orange Park, near Jacksonville, operated by the Loyal Order of Moose, for older members of that fraternal organization and their wives; Penney Farms in Clay County a few miles west of Green Cove Springs, founded by a business man and designed primarily to accommodate retired ministers and their wives; the Carpenter's Home in Lakeland, operated by the Carpenters' International Union, generally considered by other union groups as a "show place" of its kind.

Moose Haven is not satisfied to just supply food, clothing and shelter. In addition it is doing research work into the problems of older people and seeking to devise means whereby their years as senior citizens may be made happier, more rewarding and more productive.

In this issue of Health Notes we have tried to keep in mind its basic purpose — to think in terms of people, their health and com-

fort and the service and the attentions they require. For age can be a terrible thing, when a man or woman sees friends go to the grave with increasing frequency as the years race on, and often be forgotten or neglected by kith and kin.

## **In the Summing Up**

Many who have studied the problem of control of nursing and boarding homes are of the opinion that Florida urgently needs these two things:

1. A legislative act to enable the State Board of Health to devise rules and regulations for the operation of such institutions, and with sufficient authority to prosecute violators who ignore repeated warnings on the need for corrective measures.

2. A law to safeguard the would-be purchaser of a so-called prepaid life-care plan, who is offered food and lodging for the rest of his life in return for payment of a specified sum. This control could come through the State Insurance Commissioner's office.

The time is short. Florida's older-age population is growing rapidly. We have a long, hard fight even to catch up on years of neglect. And this is a point of considerable concern to many thousands of people in one of the finest states in the nation.

# The State Board of Health

1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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Mental Health Program

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All counties in Florida have organized county health departments except  
ST. JOHNS COUNTY

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***"We cannot regard this problem of shelter care for the aged lightly. We must recognize that we face and are experiencing, because of medical advances, a lengthening life expectancy. . . . All our communities have a responsibility for careful and continuing planning for the needs of our aged."***

From the Proceedings of "Living the Later Years."

# Florida

## HEALTH NOTES



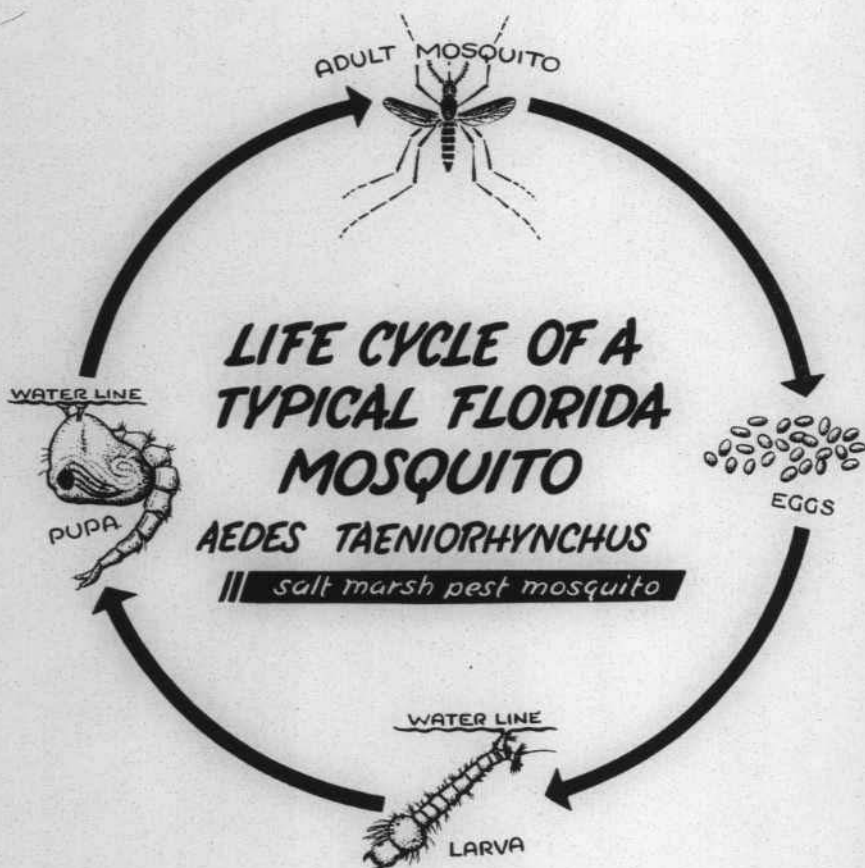
March  
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### MAN'S GREAT ENEMY

Vol. 45  
No. 3



# MAN'S GREAT ENEMY . . .



## FLORIDA HEALTH NOTES

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## . . . THE MOSQUITO

THERE IS AN OLD SAYING, "It can't happen here." Probably this was the feeling of our Panamanian neighbors in 1948 because they had not felt the ravages of yellow fever since construction days of the Panama Canal in 1905. But, suddenly, out of a clear sky, yellow fever swept in (reportedly from the jungles of Columbia, where it had been smouldering), to spread like a forest fire over Panama and some of the other Central American countries. Fortunately, the fire could be partially controlled because from Africa and the United States came airplanes laden with yellow fever vaccine which was to be injected into the population on a mass scale never before experienced in the annals of public health work. A great number of people had paid with their lives, and the disease was once more implanted in the jungles of the Central American countries.

It was in a spirit of fun during 1951 (when Florida was having mosquito trouble due to unusual weather conditions and a shortage of chemicals), that California shipped the Miami Chamber of Commerce a container of mosquito-eating fish. But there is an old adage to the effect, that "birds always come home to roost." In 1952, California experienced unusual weather conditions which brought about heavy production of mosquitoes in the Central Valley, and Californians were to experience one of the worst epidemics of encephalitis (a virus disease which causes brain fever in horses as well as man) ever to be recorded in the state. Before the epidemic could be brought under control, 49 persons had lost their lives and over 743 cases had been reported. The mosquito-borne disease, malaria, that had been prevalent in California for a great many years, also made its appearance in a Campfire Girls' Camp. This outbreak of malaria was started by an infected Korean veteran who slept near the camp and was bitten by mosquitoes who in turn bit the girls. Nine girls came down with malaria and six others were suspected of having the disease.



Destroying adult mosquitoes, using a riding lawn mower with a fogging attachment.

## **OH! BUT IT CAN'T HAPPEN IN FLORIDA!**

Well, that's what you think! But did you know that Florida has both the Western and Eastern strains of encephalitis? The Western strain, based on clinical findings, appears to be prevalent only west of the Apalachicola River. The highly fatal Eastern strain is widely distributed in the State. A survey conducted during 1952 revealed that 72 horses had the disease and all succumbed.

As long as the State has mosquitoes that bite human beings and mosquito-borne diseases are prevalent in Florida or in the world, the possibility of mosquito-borne epidemics will always exist. The diseases of yellow fever, dengue fever and malaria are all mosquito-borne diseases and have been banished from the

State at the present time. However, it must be remembered that these diseases are still present in many parts of the world and under these conditions our military personnel from Korea and visitors from foreign countries are capable of bringing in the infection and starting an epidemic. During 1952, 49 cases of malaria acquired outside the limits of Continental United States were reported in Florida.

There is no question but that Florida is growing by leaps and bounds, and a crowded population, plus the creation of artificial lakes by building dams in the western part of the State and the construction of dykes in the southern part of the State, adds to the danger of mosquito production and disease transmission. The large artificial lakes in South Florida, now an asset to the agricultural interests of the State, could very well become a great liability to the populated areas of south Florida should the mosquito population be permitted to build up enough to plague the area with their bites and by spreading disease.

## THEY COST MONEY

Another factor to be considered is the effect of mosquitos on the economy of the State. For the past twenty years we have endeavored to attract tourists to the State to enjoy the excellent beaches, coastal fishing, bass-filled lakes, cool ocean breezes in the summer and warmth and sunshine during the winter months. Today tourists bring in one-third of the income to citizens of the State. It is estimated by the State Chamber of Commerce that the income to our citizens at the present time is almost four billion dollars a year. But there is no question that mosquitoes and biting flies have been a great drawback to the fullest development of the State.

The citizens along the coastal areas and in the lake region have a tremendous investment in tourist courts, hotels and eating establishments. It is reported that Florida has 31,613 motor courts with 573,120 rooms, and 1,502 hotels with 91,380 rooms. It would appear to be the responsibility of the State to do everything in its power to protect these investments as well as to provide the thousands of tourists with a comfortable and healthful visit. Our visitors are dependent upon these housing and eating places, as well as Florida's recreational facilities, when they are in the State enjoying the natural as well as man-made attractions. Incidentally, they spend \$9.72 a day, according to the State Advertising Commission. This money spent by our visitors certainly

accrues to the benefit of all permanent citizens. Therefore, it can be seen that it is almost mandatory if we are to protect and expand this source of revenue that it is doubly important that we do everything in our power to make the vacation of the visitors as delightful and tranquil as is possible. There is little doubt that the summer tourist trade could be doubled and that many winter tourists would come earlier and stay later if they had reasonable assurance of a visit free from mosquitoes, sandflies, and other biting insects.

### **Effect On the Livestock and Poultry Industry**

The livestock industry, one of the largest and most rapidly growing industries in our State is greatly affected by the transmission of animal diseases such as anoplasmosis (a protozoan disease in cattle), sore head or fowl-pox (a virus disease in poultry). Other animals, too, are persecuted by the bites of untold millions of mosquitoes. The loss in meat, milk and egg production probably runs into millions of dollars each year.



That depression on the right can fill with water, breed Glades mosquitoes, who can plague these cattle.



## Effect On Labor Production

Along the coastal areas, it is frequently necessary to delay pruning and cultivating of groves, harvesting of fruits and vegetables, sawing of pulpwood as well as the slowing down of industrial activities because of the heavy infestation of salt-marsh and glades mosquitoes which makes it impossible at times to engage in outdoor labor because of their ferocious biting.

## MOSQUITOES MEAN POVERTY, MISERY, DISEASE AND DEATH

It was estimated by the World Health Organization in 1952 that 300,000,000 people are still under the yoke of malaria in the world and that 3,000,000 die from that malady each year. And after the discovery of Florida in 1513 many parts of the State were virtually uninhabited for many years because of the scourge of the greatest of man's plagues — *Malaria*. It was absolutely impossible for many sections of the State to develop because of this disease which struck down the early settlers each summer and fall, making it impossible for them to work. They also had the added expense of providing for chill tonics and doctors' bills. Certain sections of the State were "blighted areas" and visitors and prospective residents would not come into these areas to visit or establish a permanent home for fear of contracting the disease.

The three great mosquito-borne diseases: (1) yellow fever that caused panics up to the turn of the century; (2) dengue fever also called "breakbone fever" because it made one's bones to seemingly break and which made its last stand in the epidemic of 1932; and (3) the great scourge malaria that had its last epidemic in 1937 — have now released their shackles from our State after fifty years of untiring effort to conquer them.

The above story must never be forgotten, because as long as mosquitoes are present in the State these diseases *can return* to plague us. We must be constantly on the alert at all times for the first indication of human diseases transmitted by mosquitoes, so that the first sparks may be eliminated before the flames have had an opportunity to flare into a full blown epidemic. A mosquito-borne epidemic in our State at this time would without question cause the loss of untold millions of dollars because visitors would stay away from Florida, but *what is more important*: hundreds and thousands of people would fall ill or die.

And there is a second public health consideration other than disease transmission, one that is becoming quite important due to our modern "high-gearred" way of life. It is extremely important today that individuals have an opportunity to take vacations where complete relaxation can be obtained. It is a recognized fact that *heart disease and hypertension* are two of the greatest killers in this country today. Florida's mild climate, sunshine, and white beaches bathed by blue-green waters makes it an ideal spot in which to rest a tired body and weary mind. But there is one evident drawback that is sometimes encountered along the coastal areas which counter-balances all our assets and that is the *annoying bites* of mosquitoes and biting insects. It is time that Florida realized this impediment so that the complete development of our State as the health paradise of the North American continent can be fully realized.

## MOSQUITO PROBLEMS FOUND IN THE STATE

There are *seventy* different problems, since there are *seventy* different species of mosquitoes found in Florida.

No attempt will be made to describe the life history and habits of all seventy species of mosquitoes and only those mosquitoes causing the greatest amount of trouble will be considered. And while some of the names are long Latin affairs, nevertheless we cite a few to give you a faint idea of the extent of the problem.

### Malaria Mosquito Problem:

All mosquitoes must have water in which to develop. They cannot develop in bushes, weeds, grass or hedges as such. However, certain adult mosquitoes do seek this type of place as day-time resting places.

There are nine different species of mosquitoes found in the State which are capable of carrying human malaria. They can be found breeding on approximately 1,000,000 acres of land. The adult females fly about one mile from the breeding area in search of blood meals and may live for several months. Each female lays from 100 to 200 eggs singly on the water surface at any time, and is capable of laying several hundred eggs before death. The eggs hatch in 1½ to 2 days and the small wigglers feed and grow for 7 to 8 days before changing to the comma-shaped pupal stage which lasts from 1½ to 2 days. Then the adult mosquito emerges.



Trash behind buildings  
can hold water — breed  
domestic mosquitoes.



Containers like these breed domestic mosquitoes. Don't let water stand in them!

In some unscreened homes, as many as 3,000 adult malaria mosquitoes have been observed. The principal malaria-carrier, *Anopheles quadrimaculatus*, has been found in every county in the State. It breeds abundantly in alkaline ponds, lakes and gum swamps in the limestone and red clay regions of north and western Florida. *Anopheles crucians* is found breeding in acid ponds and cypress swamps. *Anopheles punctipennis* is a winter breeder and is found breeding in the slow-flowing alkaline streams of north and west Florida. *Anopheles atropos* and *Anopheles bradleyi* are found breeding only in certain types of salt marshes. *Anopheles albimanus* is a very rare species and is found breeding in sunlit pools on the Florida Keys. *Anopheles walkeri* is found breeding mostly in the central part of the State in the heavily vegetated lakes. *Anopheles georgianus* is a rare species found breeding only in seepage areas. The last of the nine species, *Anopheles barberi*, is peculiar in that it is found breeding only in water that collects in hollow hardwood trees.

#### **The Domestic Mosquito Problem:**

The yellow fever or dengue fever mosquito, *Aedes aegypti*, is one of the best known domestic mosquitoes. They breed only in close association with humans; in all types of temporary receptacles containing rain water such as gutters, tubs, tin cans, automobile tires, tanks, drains, and flower vases. The eggs are laid singly, usually on the sides of the container just above the water line. They seldom fly more than 100 yards from the breeding source and can be controlled by the complete elimination of water-holding receptacles. The common house mosquito, *Culex quinquefasciatus*, is also found breeding in temporary receptacles as well as contaminated water in cesspools, ditches and ponds. The eggs when laid are glued together in rafts. This mosquito transmits bird malaria, fowl-pox and other diseases of man and animals.

#### **The Salt-Marsh Mosquito Problem:**

There are two species of salt-marsh mosquitoes — *Aedes sollicitans* and *Aedes taeniorhynchus*. It is estimated that approximately 700,000 acres in the State are capable of breeding these two species. *Sollicitans* predominates along the coastal areas in the northern part of Florida, but *taeniorhynchus* is more abundant in the southern part. These two mosquitoes cause greater annoyance to the largest number of people since they are more plentiful than any other species of mosquito in the State. The



An aerial view of a salt marsh which has been ditched to help control mosquitoes.

eggs are laid singly on damp soil or along the margins of receding water. The production of these two species of mosquitoes is confined to areas near the coastline in soil containing salt. Any marsh, swale, mangrove swamp, or depression that is flooded by rain or high tides (not normal tides) and where the water remains in the breeding area for a week or longer, is capable of hatching the eggs and putting out a brood of mosquitoes in approximately 7 to 9 days. A drying or developmental period is necessary before they can hatch and they may remain in good condition from one to several years if no water is present to hatch them. Studies have shown that in some areas of the State as many as 113,000,000 eggs per acre are present. This stupendous egg build-up is responsible for the tremendous broods that come off after heavy rains or high tides. These mosquitoes can fly as far as 25 miles from the breeding area in three days. They appear to fly with the wind and for the most part hug the coastline. The adults may live one month or longer.



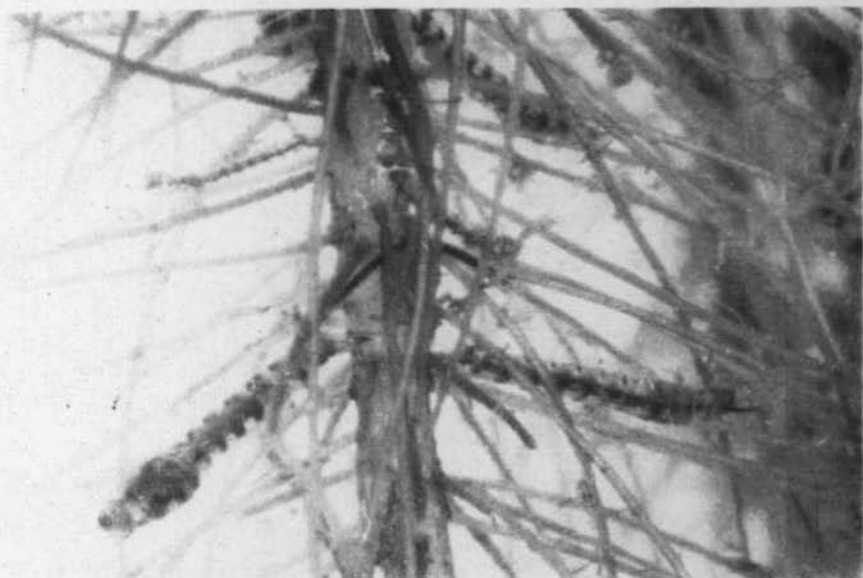
### **The Glades Mosquito Problem:**

The "Glades Mosquitoes," *Psorophora confinnis*, and the gallinipper, *Psorophora ciliata*, are the most prevalent mosquitoes in the Florida Everglades as well as being found in other parts of the State. It is estimated that approximately 10,000,000 acres are capable of breeding these two mosquitoes. Their eggs are laid singly on moist soil in depressions subject to flooding with fresh water, such as temporary ponds. The eggs may dry a year or more. The Glades mosquito is a rapid breeder and may reach maturity five days after the eggs hatch. They can fly 5 to 10 miles from the breeding area. These savage persecutors have been known to kill cattle in the Everglades area, but fortunately the adults are short lived as compared to other mosquitoes. The *ciliata* mosquito is one of the few canabalistic mosquitoes as their larvae feed on the larvae of *confinnis*. The gallinipper is awesome because of its unusual size, but it is seldom found in large numbers.

### **The Mansonia Mosquito Problem:**

There are three species of *Mansonia* mosquitoes in the State. The most prevalent one, *Mansonia perturbans*, has a widespread distribution in the State and is considered the most important pest species in the Central Lake region. The eggs are glued together when laid on the surface of the water near all types of aquatic plants. The larva and pupa differ from all other type of mosquitoes in that they remain submerged and obtain their air supply through the roots of aquatic plants. This group has the longest life span in the larval and pupal stage of any other mosquito. There is only one generation a year and the adults appear to be fairly long lived and are thought to fly about five miles from the breeding area. They are an important species since they transmit heart worms in dogs and have been found infected with the virus of equine encephalomyelitis. *Mansonia indubitans* is similar to *perturbans*, but it has two broods a year and has been found breeding only on water lettuce, although some other plants are suspected. *Mansonia titillans* is found breeding on water lettuce in the southern part of Florida.

**The Swamp Mosquito Problem:** The inundation of swamps by heavy rains and by river floods produce tremendous broods of certain species of *Psorophora* and fresh water *Aedes* mosquitoes.



Some mosquitoes get air through plant roots under water. Here you see mosquito larvae attached to roots of water lettuce.



A canal full of water lettuce.



Mosquitoes can breed in water that collects in air plants—like this man is holding.



Mosquitoes can breed in tree holes.

**The Temporary Pond and Canal Mosquito Problem:** There are several species of *Culex* and *Culiseta* mosquitoes that breed in such places which present a problem on occasion.

**The Tree Hole Mosquito Problem:** There is one species of *Anopheles*, as well as several species of *Aedes Orthopodomyia* and *Megarhinus* mosquitoes that propagate under these peculiar breeding conditions.

**The Air Plant Mosquito Problem:** There are three species of *Wyeomyia* mosquitoes that breed in the water that collects in leaf bases of air plants. Where the plants are numerous in trees these mosquitoes become very pestiferous.

## MOSQUITO CONTROL IN THE STATE

The fight began in 1889 when the State Board of Health was organized, approximately 10 years before man knew that yellow fever and malaria were transmitted by mosquitoes. However, the first present-day effort to set up a mosquito control project in Florida was at Perry in Taylor County in 1919. This was a joint undertaking between the Burton-Swartz Lumber Company, City of Perry, Taylor County and the State Board of Health. The project at the time was considered to be one of the largest to ever be undertaken in the south and involved an expenditure of \$28,000.00.

During 1922, the Florida Anti-Mosquito Association was organized for the purpose of devising ways and means of controlling mosquitoes in the State, which according to records, were terrible at that time. This Association prevailed upon the Legislature to pass three mosquito control laws making it possible for the citizens in a prescribed area to petition the Board of County Commissioners for an opportunity to vote for the establishment of a mosquito control district. Under the present laws it is possible for any part of a county, the entire county or one or more counties to band together to form a mosquito control district.

The first mosquito control district was approved by Indian River County during 1929 and by 1940 there were 10 mosquito control districts in operation. At the present time there are 24 mosquito control agencies which have been created by law on a local basis.

Every county on the eastern coast of Florida has an organized mosquito control district. On the west coast there is a mosquito control district in all the counties from Monroe northward to Levy County with the exception of Charlotte and Hernando counties. Panama City Beach voted in a district in September, 1952 the first district in West Florida.

Many counties and cities now carry on mosquito control under the supervision of the county and city Health Departments.



Domestic mosquitoes can enter screened homes and breed in flower vases.



## How Is Mosquito Control Accomplished?

### 1. By the location and elimination or alteration of breeding environments:

- A. Receptacle breeding: If each individual in the State would inspect his premises and see to it that no container was permitted to retain water for more than one week, it would then be possible to completely eradicate the domestic mosquito *Aedes aegypti*. Unfortunately, people seldom inspect their premises, vacant lots and business establishments and do allow water to remain in flower vases, tubs, buckets, barrels, tin cans, boats, roof gutters, cisterns, automobile tires, junked cars and other containers which hold water. Where it is necessary that water be retained in cisterns, tubs, boats and similar containers, an effort should be made to spray kerosene on the water surface once a week, or place *Gambusia* minnows in them to keep breeding under control. Automobile tires should be stored under cover but when this is not possible, the inside should be treated with paris green or a dust containing 10 per cent DDT or 1½ per cent gamma isomer of Benzene hexachloride. Tin cans should have holes punched in them in such a manner that they cannot retain water.
- B. Air plant breeding: This type of breeding can be eliminated by the removal of the air plants from trees, or by spraying the plants with a 0.25 per cent copper sulfate solution.
- C. Tree hole breeding: This type of breeding may be eliminated by filling the tree holes with cement or similar materials.
- D. Aquatic Water Plant Breeding: All types of water plants must be eliminated from permanent bodies of water to control *Mansonia* mosquito breeding. The elimination of aquatic plants can be accomplished by deepening permanent bodies of water with dredges and draglines; also by the use of under-water cutters, and by the application of weed killers such as 2, 4-D and 245-T.



Water left in boats must be sprayed.

- E. Surface Water Breeding: The vast majority of mosquitoes breed in water remaining for three days or longer in depressions, marshes, swamps, ponds, lakes streams and ditches.
- a. Polluted surface water breeding: It is practically impossible (except by filling of the breeding area) to control the breeding of *Culex quinquefasciatus* in ponds, lakes, canals or streams which have been contaminated by raw sewage, canning plant waste or other waste material from other types of industries. as such material brings about the depletion of oxygen in the water which kills the mosquito-eating fish, making it possible for the mosquito larvae to flourish unmolested.

- b. Natural surface water breeding: The elimination of mosquito breeding here can be accomplished in three ways: (1) by complete filling so that no water can stand on the land for more than three days. (2) by inducing the movement of water by means of canals, ditches and under ground drains from areas where breeding will take place to permanent bodies of water such as oceans, bays, lakes, rivers, etc. In ditching for salt marsh *Aedes* it is necessary that ditches have water present in them *at all times* or if this is not possible, that they be so constructed and maintained that no water can stand in them for more than six days. Where ditches are allowed to become clogged and retain water for more than seven days, they may become potential breeding areas for salt-marsh *Aedes*. All types of ditches and canals must be cleared of vegetation at all times in order to control *Mansonia*, *Culex* and *Anopheles* which may breed under such conditions. In ditching we should strive for concrete lining and underground tiles which are the ideal type of drainage systems.
- c. By the complete control of all vegetation in permanent bodies of water so that mosquito-eating fish will have complete access to them, for under most conditions they are capable of devouring all mosquito larvae.

It can readily be seen that in a State as flat as Florida and having a rainfall of around 60 inches a year, and where plant growth is luxurious with millions of acres of swamp area, it would be a gigantic undertaking to accomplish the above three methods of control on a state-wide basis and would require untold millions of dollars. Therefore, these types of mosquito control must be confined to the populated and recreational areas where the economy of the area will support such a program. This can be accomplished over a period of years and in time the mosquito problem can be completely built out of the populated areas.



Draining a salt marsh, using a dragline to dig a canal.

## **2. By the Destruction of the Adult Mosquito Population:**

It should be evident that when a small village or town is surrounded by vast swamps, marshes and other potential mosquito breeding places that it would not be economically feasible to consider eliminative measures on a large scale. Therefore, in order to effect a certain degree of relief, the application of mosquito killers in and adjacent to the populated areas is frequently indicated. This can be accomplished in three ways: (1) by the application of a poison such as DDT or BHC by aircraft, using 1/5 pound of DDT or 1/10 pound of gamma isomer of BHC in an oil solution at the rate of 2 quarts per acre, (2) by ground mist blowers using mosquito poisons in oil solutions, water emulsions, wettable powders and dusts; (3) by thermal-aerosol fog machines applying 5 per cent DDT and 3 per cent Lethane in diesel oil, or 8 to 10 per cent DDT in diesel oil.

Air as well as ground equipment has its limitations. It is not possible to destroy mosquitos from the air where there is a heavy canopy of trees or when the ground is hot or when it is windy. Ground equipment cannot reach all areas, is ineffective when the ground is hot and thermal-aerosols (fog machines) are not effective in high winds. The above three methods are capable of killing from 50 to 70 per cent of the adult mosquito population under favorable conditions, but the small percentage which is not destroyed is capable of producing repeated large broods which must be routinely sprayed in order to obtain relief.

## **3. By the Destruction of the Immature Stages of the Mosquitoes (pupa and larva)**

Larviciding can be accomplished from the air or by ground equipment. The larvicide must be applied thoroughly in order to obtain a complete kill. Heavy vegetation, winds and heat currents are drawbacks in obtaining complete coverage. Some larvicides such as oil will kill by suffocation as well as being toxic and killing by contact with the breathing tube. Other larvicides such as DDT and BHC kill as stomach poisons as well as contact poisons. The chlorinated hydrocarbon larvicides (which are DDT, BHC and others), the phosphatic, pyrethrum, rotonones and other poisons may be applied in an oil base spray, water emulsion, wettable powder, dust or impregnated in small pellets for penetration of heavy vegetation. The greatest drawback to the chlorinated hydrocarbon larvicides is that the mosquito will build up resistance to the chemical much faster in the larval stage than when used directly on the adult stage of the mosquito.





A familiar sight is an oil spray being applied to a roadside ditch.

## PRESENT STATUS OF MOSQUITO CONTROL

There is more emphasis today being placed on eliminative control, especially in the coastal areas. Many of the districts have purchased draglines and other dirt-moving equipment which will pay dividends in the future development of the State. At the present time the State is spending \$350,000 a year on mosquito control which is entirely too small a sum as compared to the magnitude of the problem and the good that can be derived from effective mosquito control practices, especially in the coastal and recreational areas of Florida.

## Funds Being Spent by Mosquito Control Districts and other Agencies:

The 1952-53 budgets show that approximately the following amount of funds have been designated for mosquito control:

### Mosquito Control Districts:

Pasco.....	\$ 6,661.00
Pinellas.....	50,000.00
Hillsborough.....	45,000.00
Manatee.....	25,000.00
Sarasota.....	45,000.00
Boca Grande.....	9,900.00
City Fort Myers.....	22,000.00
Fort Myers Beach.....	8,727.00
Naples.....	9,870.00
Monroe.....	25,000.00
Dade.....	90,039.00
Broward.....	25,000.00
Palm Beach.....	81,628.00
Martin.....	16,234.00
St. Lucie.....	19,206.00
Indian River.....	92,000.00
Brevard.....	184,545.00
Volusia.....	126,000.00
Flagler.....	3,200.00
Anastasia Island.....	12,017.00
East Duval.....	22,000.00
Amelia Island.....	22,000.00
<hr/>	
Total.....	\$ 941,027.00

Approximate amount of funds spent by counties: 26,250.00

Approximate amount of funds spent by cities: 135,444.00

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\$1,102,721.00



A model permanent-type concrete ditch, to drain water from surrounding mosquito-breeding areas.

## THE NEED FOR RESEARCH

Man has lived with mosquitoes thousands of years, yet they are still one of the lesser known insects. We know when a mosquito bites us (all too well!) but it spends only 1 per cent of its life hunting for blood. Where does it go and what does it do the other 99 per cent of its life? For certain types of mosquitoes we can answer that question well enough, at least to know how to get rid of them with reasonable efficiency. For many other kinds we know so little that much of our control is bound to be hit or miss, and some of Florida's worst pest mosquitoes are in this group. We cannot hope to ever improve control of mosquitoes without first learning what these little pests are doing during the 99 per cent of their lives when they are not tormenting us. *That means research.*

But even if we knew the private lives of Florida's chief mosquito pests from A to Z, that alone would not be sufficient. There may be hundreds of ways of controlling a certain kind of mosquito in a certain area, but only one of these is the cheapest, the easiest, the best, and the wisest method. We must keep looking around for a better way to do the job. All this means research.

Research finds the answers to the questions that need answering. No one realizes the urgency of answering Florida's own brand of mosquito control questions more than the people who have the job to do: the directors of the many mosquito control districts, and the State Board of Health. They know what any thinking person will concede: research is the only way to better airplanes, better television sets, better clothing, better food, better medical care, — and better mosquito control.

## DISEASES TRANSMITTED BY MOSQUITOES TO MAN & ANIMALS IN FLORIDA

NAME OF DISEASE	CAUSAL ORGANISM	MOSQUITO VECTOR	DISEASE OF
Malaria (Human)	Protozoan	<i>Anopheles quadrimaculatus</i>	Man
Yellow Fever	Virus	<i>Aedes aegypti</i>	Man
Dengue Fever	Virus	<i>Aedes aegypti</i>	Man
Encephalomyelitis (Encephalitis)	Virus	<i>Mansonia perturbans</i> <i>Culiseta melanura</i> <i>Aedes</i> spp. (?)	Man—Horses Mules
Anaplasmosis	Protozoan	<i>Psorophora Confinnis</i> <i>Psorophora ciliata</i> <i>Aedes aegypti</i>	Cattle Deer
Fowlpox	Virus	<i>Aedes</i> , <i>Culex</i> spp. (?)	Poultry
Bird Malaria	Protozoan	<i>Culex</i> , <i>Aedes</i> , <i>Anopheles</i> spp.	Birds
Heartworm	Nematode	<i>Culex</i> , <i>Anopheles</i> , <i>Aedes</i> , spp.	Dogs—Cats



# The State Board of Health

1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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HON. DAN McCARTY

Governor of Florida

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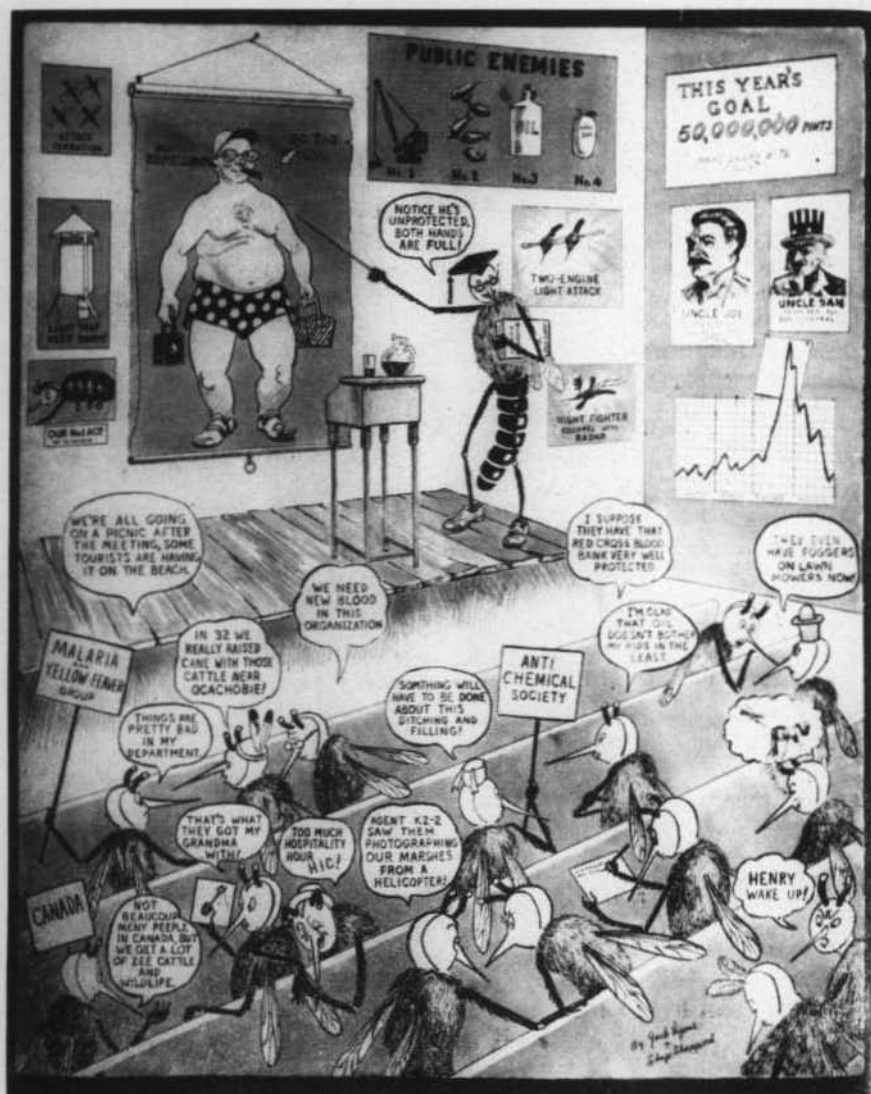
All counties in Florida have organized county health departments except  
ST. JOHNS COUNTY

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FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892

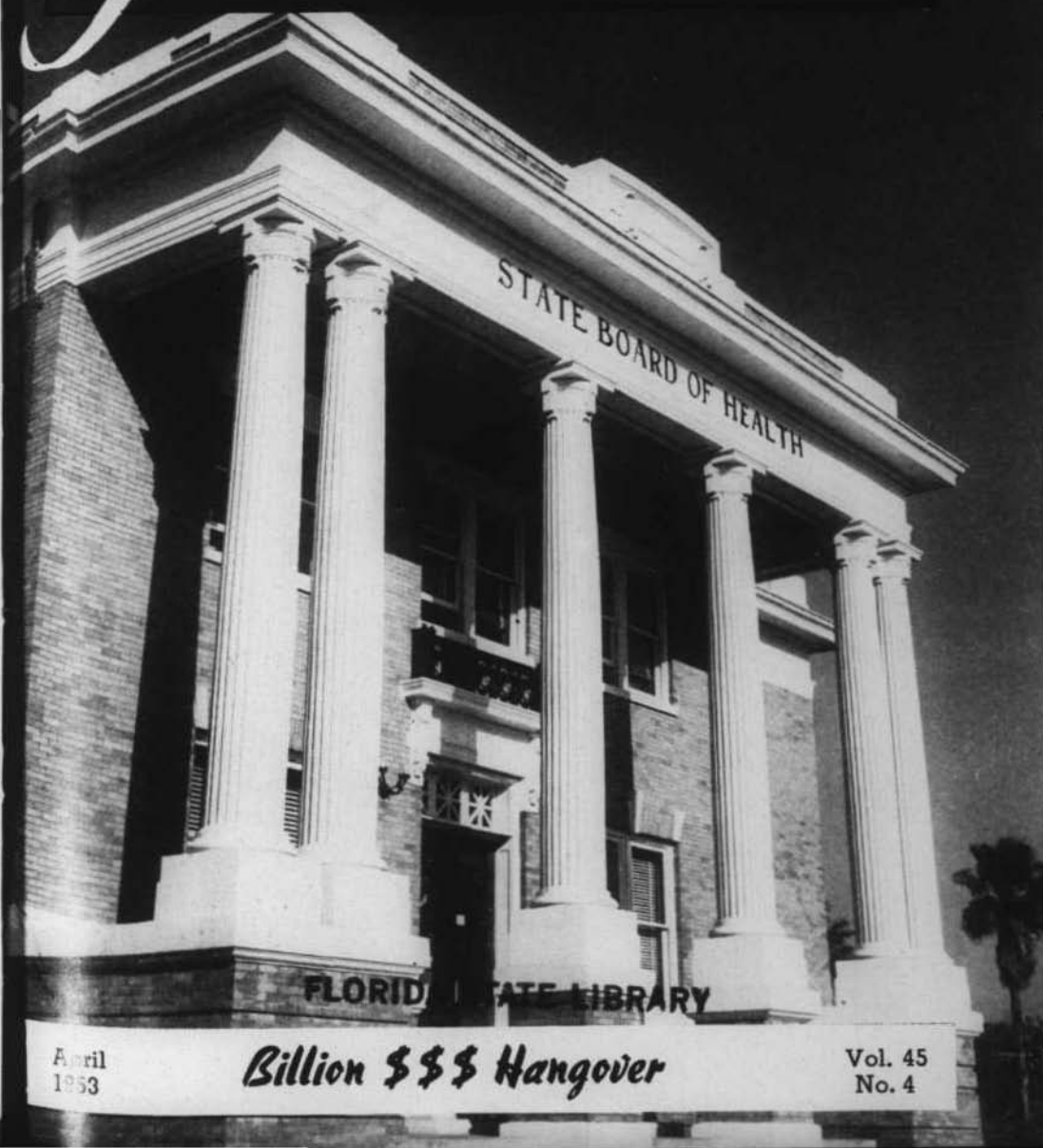
HN 12-51

### A Typical Mosquito Convention!



# Florida

## HEALTH NOTES



April  
1953

*Billion \$\$\$ Hangover*

Vol. 45  
No. 4



# Billion \$\$\$ Hangover

He was obviously the high-powered executive type. "I'll be all right," he told a friend who sought to keep him from fumbling his way under the wheel of his automobile. He was all right, too, for about three blocks. Then he ran through a red light. An automobile rushing into the intersection in an effort to beat the warning yellow light smashed into the side of his car. The impact knocked the left front door open. The driver shot from the car under the momentum of the blow from the other machine, slid several feet on his face, and came to a halt as his head hit the curb with the thumping crunch of breaking bone . . . .



Police car 28 was cruising slowly along the avenue, the riding partner playing his flashlight on doorways in a routine check for break-ins when the call came. "Car 28"—the police radio gritted throatily. "North side of Elysium Avenue in alleyway between Fourth and Fifth—man down—investigate."

"Another drunk, probably, our third one tonight," said the driver as he eased away from the curb, his eyes flicking automatically to the rear-view mirror, and picked up speed for a rendezvous with a sodden character who couldn't carry any more under his own power. It was another drunk—a begrimed character well-known to police, who had been drinking so long that all he craved in life was the oblivion of alcohol.



Jim Haney had been sneaking an occasional drink for years. His wife didn't like it, so he kept his bottle hidden in his garage workshop. The night was cold, and the gas heater had been turned up for more warmth to combat the outside chill. Jim had broken his own private rule tonight—he had taken three good-sized drinks, even though he was working with power tools.

You could have predicted it—it was just like an accident waiting for the right time to happen. The warm room, the three whiskies and the whirling bandsaw set the stage for trouble. The first time Jim Haney realized there was anything wrong was when the blood from his slashed hand began to spurt out over the clean planed board he was sawing into a table top.





They are all familiar types. Almost all of us have known the big executive who began to lean on the bottle to ease the strain of big decisions and gambling with the future; the skidrow character so close to the end of the line that the only thing he craved was the forgetfulness that alcohol could bring; the cautious solitary drinker who could rock along for months and years before trouble cracked a terrifying chasm of disaster underneath his feet.

Alcoholism — the end result of drinking too much so often that it becomes an irresistible habit — cuts across all lines, social, financial, racial, intellectual. Not all alcoholics are broken-down bums, by a long shot. Some are sensitive, smart people with one weakness — a tendency to drink too much, often without knowing why.

Is alcoholism a public health problem? Should the Florida State Board of Health be concerned with it? The best answer that we can arrive at is that a public health agency can cooperate with other organizations to do its proper share in coping with the many problems of alcoholism.

Dr. Thomas Parran, former U. S. surgeon general, once said:

"Whenever a disease is so widespread in the population, so serious in its effects, so costly in its treatment that the individual unaided cannot deal with it himself, it becomes a public problem." Alcoholism fits all the above categories.

Says a Florida newspaper managing editor:

"Alcoholism is certainly a public problem. It's a problem that our public health agencies can help to solve. The treatment of the alcoholic is not an easy thing. Almost all need medical attention, many need hospital care or clinical examination, and some require complete rehabilitation.

"All you have to do is to check on the number of automobile accidents in which drunken driving figures, check on the divorce courts to see how often drinking is a factor in breaking up homes, probe industrial accidents that have at least a part of their cause in drinking, to realize that drinking and alcoholism is a problem that affects a great many people, non-drinkers as well as the drinkers.



## *public education*

The alcoholic beverage producers, themselves, are of the opinion that public health agencies can play a significant part in the control and gradual elimination of alcoholism. In a pamphlet issued by the Licensed Beverage Industries, Inc., entitled "Alcoholism, Principles for Public Action," it is stated:

"Public agencies established to cope with the medical aspects of alcoholism should be an integral part of existing state, county or city health departments. A specially trained, full-time staff should be assigned to such programs; selected personnel should be used as needed.

PUBLIC EDUCATION IS CONSIDERED AN ESSENTIAL FEATURE FOR THE FULLER UNDERSTANDING OF THE ALCOHOLIC AND THE MAINTENANCE OF SUCH PROGRAMS.

Medical care of alcoholics should be transferred from the police authorities to public health agencies, with custody assured for a sufficient period of time to permit effective rehabilitation."



## *this is the question*

What are "alcoholism problems" anyway? Do we really have them in Florida? Figures for the State are not available. But it has been estimated upon good authority that approximately 65 million people in the United States drink at one time or another. Of that number, it has been figured, about 10 per cent find alcohol a serious problem in their lives. On that basis there must be nearly a million people in Florida who drink. Of that number, roughly 100,000 probably find alcohol becoming a problem some time in their lives. So, Florida's problem in this field is roughly comparable with the national problem.

The "problem" is nothing new. It has existed for thousands

of years, probably since the time that man discovered fermented grapejuice would turn into a pleasurable drink which gave a feeling of well-being and exhilaration for a few hours. It could also intoxicate and stupefy if taken in too large amounts, and there was the evil result.

But the approach to the problem *IS* new. For thousands of years people thought there was little or nothing that could be done for the person who was "never deep in anything but wine." That earlier day public attitude was not peculiar. People had the same idea about persons who developed syphilis or tuberculosis, or "went crazy." Today we know that the syphilitic can be cured, that tuberculosis can be conquered, that mental illness is subject to treatment, with many of their victims restored to normal living. Why not do the same thing for those having difficulties where alcohol is a major part of their unstable condition?

The biggest bar to "doing something" about the alcoholic has been public opinion. But the public was won over to treatment methods for venereal diseases, tuberculosis, mental illness. The same trend is setting in where alcohol problems are concerned. One of the organizations partly responsible for this changing trend is the notably good work being done by the Yale Center of Alcohol Studies, affiliated with Yale University at New Haven, Conn. The attitude toward alcoholism of some of the educators and medical men has been put neatly into one sentence by Dr. E. M. Jellinek, director of the School of Alcohol Studies at Yale. Says Dr. Jellinek: "By all standards of present day knowledge alcoholism is a disease rather than a disease symptom and the alcoholic deserves to be the object of public health endeavor."



## *an answer or two*

Two important points should be stressed here in emphasizing up the alcohol problem and what can be done about it:

1. Public education into the probable causes of alcoholism and current recommended treatment methods, with emphasis on the alcoholic as a "sick" person, rather than as a wilful or weak character who lacks the desire to improve himself.

2. Further research into all phases of the alcohol problem, physical, mental, social, as a means primarily of arriving at a better understanding of alcoholism and its treatment.

Education will enlist more people in the campaign against alcoholism; heightened public interest will help to spur research and make more funds available for such work. What we know today about alcoholism is not necessarily the final answer, no more than medical science had the final answer a few years ago to the problems of malaria and scurvy.

What can you do with a man or woman who has progressed from the occasional drinker to the heavy drinker to the "alcoholic," or "uncontrolled drinking" stage? The present approach might be described as "The Great Triangle" of treatment and rehabilitation as follows:

## 1. PHYSICAL

The doctor, preferably the family physician, who by close association with the patient can take more than a purely medical view of the individual. The doctor can begin the "hangover" treatment, follow through with a complete physical examination to determine if there is anything organically wrong which might help to explain heavy or uncontrolled drinking, and finally offer sound advice and counsel.

## 2. MENTAL

The psychiatrist, the psychologist or the psychiatric social worker, who can probe into the underlying mental pattern that so often shows up and helps to explain the causes of alcoholism.

## 3. INSPIRATIONAL

Support given by family, friends, the boss, fellow-workers, churches and other religious organizations and Alcoholics Anonymous.

Drinkers may be divided into three classifications:

1. the "occasional" drinker; 2. the "heavy" drinker, generally a person who imbibes daily in varying amounts; 3. the "uncontrolled" drinker, who has been described colloquially as "the kind of man who can't leave the stuff alone."



## legal aspects

This country long has been aware of the problems created by uncontrolled drinking. Efforts of temperance workers to control such drinkers by making alcoholic beverages illegal was climaxed in 1919 with the passage of the 18th Amendment to the Federal Constitution. This federal law, which came to be known as the "Volstead Act" (after its Congressional sponsor, Andrew J. Volstead), defined intoxicating liquors as beverages containing "one-half of one per centum or more of alcohol by volume."

That act soon became one of the most controversial laws ever to be placed upon the statute books of this country. With legal liquor stocks greatly diminished and closely guarded, the illegal distiller and the "bootlegger" came into his own, piling up fantastic profits which helped to finance other illegal activities as the big-city "gangs" grew in importance and power.

There appeared to be one fatal flaw in the Volstead Act: it ran contrary to public opinion. The bootlegger and his customer were equally guilty of violating the law. So, the Volstead Act came off the books in 1933.

Then began an indirect campaign to control liquor sales by boosting the price through taxation. But as this is written that means of control may be losing its effectiveness. As the tax rate continues to climb on legal liquor, it seems to offer greater inducement to the illegal distiller to boost his production. "Bootleg" liquor, which has always been sold to some extent, is making another comeback, with its attendant rise of lawlessness.

The Florida State Board of Health takes no sides either with prohibition or high taxation as a means of controlling liquor consumption. We have no argument with the "wets" or the "drys." But we are interested in the possibilities of education as a way for helping the "uncontrolled" alcoholic solve his problem, of seeking the early medical and psychological basis for his drinking and of guiding him into more constructive channels.



For drinking is a peculiarly personal problem. Each case has to be considered on its individual merits. Those who have made a study of the problem are of the opinion that some people can drink in moderation with safety, while on the other hand there are problem drinkers who must face up to one unalterable fact: they must learn to do without alcoholic beverages entirely. For such people, to take one drink is the starting point for an uncontrolled drinking spree that ends only when that particular person is unable to drink any more.



## *alcoholics anonymous*

Physicians, psychologists, social workers, church groups and others have contributed substantially in providing help for the alcoholic, but the organization which shows the greatest promise in rehabilitating the "uncontrolled" drinker is a group which we mentioned previously — Alcoholics Anonymous.

"I have been studying Alcoholics Anonymous for several years," says one Florida businessman, "and I have never really decided what makes it tick. I don't know how it works. All I can say is that it does the job better than anything I know of today when it comes to putting a drunk back on the right track.

"You could say that AA has a deep, underlying religious basis, but the membership probably wouldn't like that — but you do have to admit that it has some of the philosophy of religion. In order to join AA, you have to confess that you have a problem too big to handle alone, you have to apply for admission willingly and free from outside pressures; you must resolve to do all you can to help yourself and to cooperate with those willing to help you. Last and possibly most important, you must be ready to go to the help of a fellow member who finds his own resolve weakening where alcohol is concerned."

Out of a possible 100,000 problem cases we mentioned earlier, it has been estimated that Florida has about 15,000 men and women who suffer from alcoholism. As Alcoholics Anonymous grows in this state, it can offer more and more help to these people. More than 60 chapters already are operating in Florida, with new groups being added periodically. From Arcadia to Wildwood, to the big

cities of Miami, Jacksonville, Tampa, Orlando, and in the smaller cities and towns, AA is making its presence felt in Florida.

Of Florida's estimated 15,000 chronic alcoholics, only about 20 per cent so far have been reached by AA. What is happening to the other 80 per cent? Why aren't they receiving the benefits of affiliation with AA? The answer to that is simple: AA does not seek the alcoholic — the alcoholic has to seek AA. It isn't too hard to do. For any Floridian is now within driving distance of a group which he can visit of an evening and return at a reasonable hour without inconvenience.

If the alcoholic himself asks for help, the door will open easily. After the problem drinker gets in touch with the group, arrangements are made for a member to call upon him promptly, tell him something of his own experience, invite him to the group's next meeting, and see that he gets there. After that the member who generally called upon him first will serve as his "sponsor." If the new member needs medical attention or hospital care, an AA member usually knows how it can be arranged. The sponsor also will talk to the new member's wife or family, who often need help almost as much as the alcoholic. The sponsor also may talk with the man's employer or may help him to get a new job.

If the alcoholic has not asked for help but the call comes instead from a wife or relative, the AA approach is a little more cautious. It would be preferable to have the alcoholic's family, physician or someone in whom he has confidence to recommend he get in touch with AA. Or if the patient will agree to have someone call AA for him, that is considered a type of invitation. Most AA members will go on what has been termed "third party" calls, but do so reluctantly because they have found that it rarely does much good.

A person who comes into AA **voluntarily** usually makes the grade the first time, the organization has discovered. And for an over-all average, 50 per cent continue without a slip, and still another 25 per cent finally manage to remain sober after one or more false starts. The problem that interests the organization most is: "how we can improve our methods so that we can reach more of the 'lost' 25 per cent who do not seem to respond to our present approach to the problem."

Alcoholics Anonymous is self-supporting. It receives no outside contributions. What little money it needs to operate — and some money is necessary occasionally — comes from membership donations. It is not a charitable organization; there are other

agencies already active in that field who can usually supply such help when necessary.

What is the basic philosophy of AA? It closely parallels that of the Yale Center of Alcohol Studies, that:

1. The alcoholic is a sick person.
2. The alcoholic can be helped and is worth helping.
3. Alcoholism is a community responsibility.

How can you help AA with its task? Says an AA member:

"The greatest service which can be provided by citizens, professional people and public health workers would be to become better informed on the subject of alcoholism and the role AA is playing in the work, and to be prepared to spread correct information and knowledge on this problem."

"Public meetings with an outside speaker, preferably a member of AA, are among the best-known measures to inform the public and to help remove the stigma which, though diminishing, still attaches itself to 'joining AA.' Although the alcoholic is often afraid that someone will find out about his joining, he little realizes how many people know about his problem already. If he does join he will boost his standing among the people who know of his uncontrolled drinking habits and of his sincere desire to correct them."



## *the hospital story*

For many years physicians and hospital administrators have been trying to determine how they might best serve in a program to help the alcoholic. The problems are many and admittedly more research is needed, particularly in the medical field.

The hospital administrators are uncertain. Caught between the desire to be of service and the fear that their limited bed-space might become a "dumping ground" for uncontrolled drinkers, they have sought to determine the best course of action where they are concerned. Let's find out what Florida has tried to do about the problem, and how thinking has changed since the State first began looking into the problem.

In April, 1952, the Florida Board of Commissioners of State Institutions requested the State Improvement Commission to draft plans and specifications and to seek to determine the probable cost of constructing a central hospital in the State for the treatment of alcoholics. Prior to the request from the commissioners the State Legislature had authorized such a hospital at the 1949 session. So the State Improvement Commission had already begun gathering information. Even as their architects began their task, evidence began to pile up from experience in other states that perhaps a central hospital might not be such a good idea—at least for the beginning. It was somewhat like erecting buildings for a college which had plenty of prospective students, but no faculty, no concerted plan of action, no charted teaching or training course and insufficient knowledge of the basic problem.

Pinpointing the problem was a statement from Yvelin Gardner, associate director of the National Committee on Alcoholism. Said Mr. Gardner:

"Our experience in consulting with and guiding other state programs clearly indicates today that the first objective (maximum accomplishment with a minimum of expense), can best be obtained by utilizing the existing resources which are presently established within the state.

"Undoubtedly there will be many, many pressures brought to bear for a large monument of brick and mortar to be designated as a state hospital for alcoholics. Into this building judges, jail superintendents, doctors, Alcoholics Anonymous and others will have a safe place to pour the sometimes all too obtrusive alcoholic cases, in the hope of finding the solution for a knotty problem. The amount of attention and understanding care which the alcoholic patient will receive under such circumstances will be negligible. The matter of a proper staff of orderlies, nurses, doctors, psychiatrists and administrative personnel which would be needed, and who would have a proper understanding in the treatment of the alcoholic, would be impossible to find."

Continuing, Mr. Gardner says:

"One important thing should be mentioned briefly at this point: in the mind of the public, particularly those dealing with the problem of alcoholism in the public realm, municipal, county and state governments, the impulse will be to regard the alcoholic largely in the category of the 'skid row' or 'jail drunk' type.



"Of course, this is the visible alcoholic who is found on the police rolls, court records and the public hospitals. It is to be remembered, however, that this type of alcoholic represents but about 15 per cent of the alcoholic population; the remaining 85 per cent exist in the homes, offices and factories of the community, not yet having lost wives, earning power or total standing in the community."

Three Florida groups which have been making a study of the alcoholism problem share Mr. Gardner's views. They are:

**1.** The Florida State Advisory Council on Hospitals and Ancillary Facilities, headed by Dr. Walter C. Payne of Pensacola, chairman. The council, in session at Jacksonville in May, 1952, adopted unanimously the following resolution:

"It is the concensus of opinion that we are not in favor of a central hospital for the treatment of alcoholics, and before state or federal funds are used for such a hospital that a more exhaustive study should be made on this subject by a competent individual, committee or organization."

**2.** In November, 1952, the Florida Hospital Association in annual session adopted a resolution opposing the construction of a central hospital, offered instead a proposal which would provide establishment of "a ward for alcoholics in a general hospital of each major population center of Florida" . . . since a centralized hospital would be "at such a distance from those for whom it would be designed to serve as to make transportation and other factors involving the handling of patients, economically impracticable for the several days of hospital care (usually) needed by such patients."

**3.** A workshop on Alcohol and Narcotics Education held in Gainesville in September, 1952, under sponsorship of the University of Florida's General Extension Division came to much the same conclusions. Representatives of 35 Florida organizations having an interest in the control of alcoholism assembled for the two-day workshop session, and reached the following conclusions:



**A.** Establishment of clinics providing treatment of alcoholism in several metropolitan areas, where the time of psychiatrists, psychiatric social workers and psychologists might be shared with other types of clinic or hospital, and where the services of specialized physicians are available for treatment of the many other diseases common to alcoholics. Work with the family of the alcoholic is a vital part of his recovery, for families need to be helped to understand their role in his return to normalcy.

**B.** Beds set aside in local hospitals would seem to be a more effective and less costly way to care for the alcoholic. Local care, near home, with out-patient service for a period of up to a year if necessary, is expected to yield the best results in rehabilitation.

**C.** Psychiatrists, psychiatric social workers and psychologists are not readily available in sparsely populated areas of the state, and they cannot be made available without excessive cost.

**D.** A hospital for alcoholics located in a small community in a rural area would not meet the need, which exists largely in the metropolitan areas.

**E.** There would be less possibility of a follow-up of the alcoholic, and, since it is recognized that hospital in-patient treatment is only the beginning, the establishment of such a hospital removed from clinical out-patient facilities would prove futile in most cases.

**F.** There is value in the treatment of the person being available in or near the community in which he is living in order to make use of resources (such as Alcoholics Anonymous) in following up professional care provided through the clinics.



## *medical aspects*

Most controversial question today in the treatment of alcoholism is this: is alcoholism a "disease" or sickness in itself, or is it a telltale symptom of some physical or mental disorder that should

be corrected in order to return the uncontrolled drinker<sup>78</sup> to normal living? Doctors and medical research staffs have undeniably made significant contributions in the search for an answer to the question of what makes an alcoholic. For instance, medical science has known for years that alcohol, instead of acting as a stimulant, is really a depressant which tends to affect both mind and body.

The principal role that the physician can play lies in the field of diagnosis. It is becoming commonplace in the treatment of an alcoholic person to give the patient a complete physical examination in order to determine if there are any physical reasons for the uncontrolled drinking pattern. Bodies ravaged by long-continued use of heavy amounts of alcohol have become weakened and are consequently easier prey for disease. Alcohol, with its narcotic effect on the brain, also has a tendency to lead to a break-down of social restraints. Social workers and doctors find alcoholics more likely to acquire venereal diseases, for instance, because of these relaxed standards of behaviour. So let's look at the alcoholic as a sick person, either in mind or body — or both. This, of course, presumes that psychiatrists and other physicians may share responsibility for his treatment, which must be continued long after the first symptoms have disappeared.

Another interesting development in the psychiatric and general medical field is the growing use of the "conditioned reflex" type of therapy. There are certain risks in this method which make it necessary that this treatment be given under medical supervision. It consists of giving the alcoholic one of several drugs which can cause a pronounced physical reaction when a patient attempts to drink any alcoholic beverage shortly after the drug is administered. The physical upset which almost invariably follows will cause the patient to develop a violent aversion to liquor. After the treatment is terminated by the physician, even the sight or smell of an alcoholic beverage can bring on violent nausea. Thus the patient under treatment has become "conditioned" against alcohol. Many persons retain this conditioning after one treatment session but for others whose overwhelming desire for alcoholic beverages may override the conditioned reflex, occasional repeated treatments may be necessary.

The drug receiving the most attention at this time is *tetraethylthiuram disulfide*, sold on prescription under the trade name Antabuse. We must warn, however, that this drug, along with several others used for the same purpose, must be used only under a physician's watchful direction in order to determine individual reaction.

What about diet and its effect on the alcoholic? Medical men are aware that when a person starts "drinking his lunch out of a whiskey bottle," certain dietary deficiencies are likely to develop. Alcohol, while it does contain carbohydrates and consequently does have some food value, provides no vitamins and mineral elements essential to good health, body growth and repair. Do these dietary deficiencies cause the alcoholic to continue to drink — and to drink more?

Here, again, we face a controversial issue. The answer to this will have to come out of the medical research laboratory. Meanwhile it might be of interest to note an experiment in progress at the Yale University Laboratory of Applied Physiology. Dr. Leon A. Greenberg, the laboratory's associate director, and his associate, David Lester, attacked the theory accepted in some quarters that poor diet can help to lead to excessive drinking.

When approximately 25,000 tests were made with rats, they reported recently that although a poorly-nourished male rat likes alcohol better than plain water, he also likes a number of nutritious but non-intoxicating liquids better than alcohol. Many investigators have found the hungry rat prefers alcohol over water, but rats on a good diet will drink water every time.

Greenberg and Lester pointed out one bit of evidence, however, that where alcohol is concerned, rats appear to be smarter than people. "Humans will drink to get drunk," their report noted, "but rats in the experiment had alcohol before them and still never drank too much."



## *a symptom*

Let's look at the theory that alcoholism is a "symptom" of something else wrong other than alcoholism as a disease. Says a Florida psychiatrist addressing a medical meeting in Miami:

"Alcohol, from a psychiatric standpoint, must be regarded as a mask behind which the neurotic and the immature hide. Alcohol is also a means by which the borderline psychotic often eludes detection.

"Alcoholism is not a disease, it is a symptom. It is a symptom of an underlying personality disorder. There is first the drinker who attempts to increase appetite, promote conversation and to fulfill his needs when in the company of others . . . the so-called social drinker. . . . There is secondly the individual who drinks almost every day without respect to social or convivial functions and who may or may not be missing from work for periods of time. . . . The third type is the true alcoholic or alcohol addict. For the alcoholic becomes addicted to alcohol almost upon his first swallow and once he starts drinking he cannot stop without going through a postaddictive withdrawal state."

In other words, he needs help in realizing that even one drink is much too much for him, for it starts an explosive chain reaction that can be broken either when all sources of alcohol are exhausted or he winds up in a drunken stupor.



People mourn — and rightly so — for those who are killed and injured in the nation's wars. But a close look at the vital statistics will show that you often are as safe or safer in the armed services than you are on some of the nation's highways. For the automobile, a necessity in 20th century urban and rural life, is one of the nation's major killers. So certain has death on the highway become that the National Safety Council can predict — and with surprising accuracy — the number of people who will finish any week-end motor trip on a mortuary slab. What part does alcohol play in Florida's mounting death toll from automobile accidents? Figures for 1952 are not available as this is written, but the Florida Highway Patrol and other law-enforcement agencies can tell you

Not all accidents were reported to a central collection point in 1949, but of those listed in the 12-month tally, a total of 24,555 drivers were involved. Of that number, 1,517, or 6.2 per cent gave evidence of being under the influence of alcohol in varying degrees. These drivers were involved in 105, or 13.7 per cent of the 767 fatal accidents for the year 1949.



Reporting of accidents had improved by 1950, a year which saw the number of drinking drivers rise to 2,932 or 4.9 per cent of the total of 59,705 drivers involved in reported accidents. This was a percentage decline from the year before which statisticians believed was due in part to the inclusion of more minor accidents which had been unreported the year before.

In its summary of the detailed report, the Florida Highway Patrol has this to say:

"The report of 1950 shows improvement in the situation with 8.3 per cent of those who died in traffic accidents as drinking, a decrease of 5.4 per cent; 4.9 per cent of all persons involved in accidents as drinking, a decrease of 1.3 per cent. There are too many angles, however, to be considered for one to be optimistic about such a report. . . . There are far too many accidents."

To show how significant facts can get lost or obscured in a welter of figures, it might be well to point out that the fatal accident rate for drinking drivers was approximately double that of non-drinking drivers, an indication that alcohol-blurred vision and slowed reflexes provided a double hazard for death on the highway.



Some of the tests of drivers believed to be under the influence of alcohol are being made by a machine called the "drunkometer," which can be used to analyze alcohol content by samples of the breath or blood.

And here is a seemingly odd twist of the law where the testing of drivers for drunkenness is concerned. High courts have ruled in Florida that testing a man's breath is admissible as legal evidence, but a blood sample taken for testing against the suspect's will can not be used as legal evidence.

"That means," said a laboratory worker, "that we can run a test on the blood of a dead man to determine the degree of his intoxication, but we cannot run the same test on a live man if he objects. Tests of the breath have been ruled as admissible, how-



ever, because the courts have ruled that as soon as the air from a man's lungs leaves his body, he no longer has a proprietary interest in it and such a test does not constitute an invasion of privacy or of forcing a man to testify against himself.

"We would like to run a test as routine procedure, to determine not only if a man has been drinking, but to determine the alcoholic content of his blood."

Why is a blood test a reliable indication of the amount of alcohol absorbed by the body? Because the alcohol quickly passes from the stomach into the bloodstream where it can be detected by tests. An experienced laboratory worker can predict with considerable accuracy a person's behavior from the percentage of alcohol showing up in the test. Here's the way it goes: with less than 5/100 per cent of alcohol showing in the blood test, the person being tested will feel little change; his reflexes will be normal or close to it. With between 5/100 and 15/100 of one per cent, he will begin to show definite effects in speech and movement. At or about 15/100 per cent, the person being tested could be classed as "intoxicated," with rapidly lessening controls over speech and body movements. Alcoholic stupor usually sets in when the percentage reaches about 4/10 of one per cent.

Is it possible for a person to literally "drink himself to death?" The answer to that one is "yes," provided the person doing the drinking can put it down fast enough for the concentration to reach one-half of one per cent before the narcotic effect of alcohol induces a state of stupor, and he can no longer swallow. At that point he will be in danger of death from deep anesthesia which puts the brain to sleep and paralyzes the nerves that control breathing.



## *industry — and alcohol*

We have discussed the hazards of automobiles in the hands of the drinking driver. But what about other hazards, such as those in the fields of transportation, manufacturing and industry? The nation's railroads pioneered in this field. Famous "Rule G," the regulation which forbids coming to work intoxicated or drinking

on the job, has been in effect for many years. Railroad workers are a sober lot, generally; they long ago realized they not only jeopardize their own lives, but also the lives of their fellow-workers and passengers if they break "Rule G."

Many other industries had similar hard and fast rules against drinking. Imbibing on the job — and getting caught at it, meant instant dismissal for many employees in industry and manufacturing. Of recent years, however, business and industry have been attempting to "salvage" their alcoholic employees before they finally remove them permanently from the payroll. Many companies are beginning to put increasing faith in medical and clinical services for this special problem and in Alcoholics Anonymous for the follow-up so necessary to keep an ex-alcoholic in the "ex" class.



## *action in Florida*

The modern trend for state action on the alcohol problem had its inception in 1945 when the Connecticut legislature authorized the establishment of a formal program. Since that time, at least 38 states and the District of Columbia have passed laws recognizing alcoholism as a public health problem and creating boards of commissions to establish programs. Quite a number are incorporated in state departments of health.

What is Florida doing about the alcoholism problem? We have mentioned before that the State Legislature approved the idea of seeking to determine the practicability of a special state hospital for alcoholics. The proposal for a central hospital has met disagreement from those who believe treatment on a local or regional basis might be a better way to get at the problem. It might also be noted that the State Department of Education has a program for teaching the true effects of alcohol and narcotics on the mind and body.

The workshop on Alcohol and Narcotics Education held at the University of Florida, to which we have referred before, helped to crystallize the thinking of a number of people who par-

ticipated in the two-day session in 1952. From that meeting came a number of recommendations designed to clarify the problem further and to determine a suitable course of action.

Private physicians, who see so many alcoholics — and the end result of alcoholism — are realizing that they too must know more about this problem. No longer is it just a matter of treating a “hangover.”

Then there is the encouraging growth of Alcoholics Anonymous, with its 60-odd chapters reaching nearly every city and town in Florida. As its membership continues to grow it is able to expand its program of self-help and inspirational guidance to take in more people who otherwise would be facing a “skidrow” future where uncontrolled drinking is concerned.

There are always the churches, the Salvation Army and other religious groups which have offered spiritual refuge and tangible help to many thousands of people who came to the conclusion they had a problem that they no longer could handle alone.

Then there are social workers, family members, friends, fellow-workers, employers and others who are coming in increasing numbers to realize that the sooner you get to work on an alcoholic — actual or potential — and try to understand his individual problem the sooner you can win back a straying member of society to a useful, rewarding life.

## **RESOLUTION**

***Adopted in General Session November 17, 1952***

**By Florida Hospital Association**

WHEREAS, alcoholism is a common and serious problem of today's society; and

WHEREAS, the most successful approach to the mitigation of this problem has been through the efforts of that dedicated group known as Alcoholics Anonymous; and

WHEREAS, chapters of the AA are now functioning in every major population center in Florida; and

WHEREAS, Convenient and immediate access to a local hospital ward with personnel trained in the care of alcoholics is needed by every AA group in the pursuit of their work; and

WHEREAS, such alcoholic wards need not be large because the average alcoholic needs only three or four days of hospital care and seldom requires hospital care of more than one week; now, therefore,

BE IT RESOLVED by this, the 25th annual meeting of the **Florida Hospital Association** assembled in Daytona Beach, November 17, 1952, that a program be established for alcoholics patterned after the Cancer Control Program of the State of Florida which will provide for the establishment of a ward for alcoholics in a general hospital of each major population center of Florida, the training of medical and nursing personnel for the operation of these clinics, and their operation by the local hospital in cooperation with their local AA, and other groups; and

BE IT FURTHER RESOLVED that this proposed program which would make hospital facilities immediately available in every major community at a time and under conditions which would be of the greatest benefit to the alcoholic, is recommended to the public in lieu of the construction of a large state hospital which could not be effectively utilized by local AA groups and which, by necessity, would be at such a distance from those for whom it would be designed to serve as to make transportation and other factors involving the handling of patients, economically impracticable for the several days of hospital care needed by such patients.



How much does the end results of alcoholism cost the nation each year? Says the Metropolitan Life Insurance Company, in a pamphlet entitled "The Alcoholic":

"An undetermined but undoubtedly large volume of illness and disability, involving losses in production and in income, results from alcoholism. It is also widely recognized that alcohol plays an important part in accidents, especially industrial and traffic.

"Aside from the human waste and misery, the breakup of homes and families, none of which can be measured in dollars and cents, it has been estimated that the annual economic loss due to alcoholism runs almost a **billion dollars a year.**"

#### FLORIDA HEALTH NOTES

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1217 Pearl Street or P. O. Box 210

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All counties in Florida have organized county health departments except  
ST. JOHNS COUNTY

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HN 12-51

***The rehabilitation of the alcoholic lies primarily in the treatment of his underlying emotional difficulties. To simply place a person in jail when he manifests symptoms of his inner turmoil makes about as much sense as to incarcerate a person in delirium from pneumonia.***

**R. H. FELIX, M.D.**

*(Chief, Mental Hygiene Division  
U. S. Public Health Service.)*

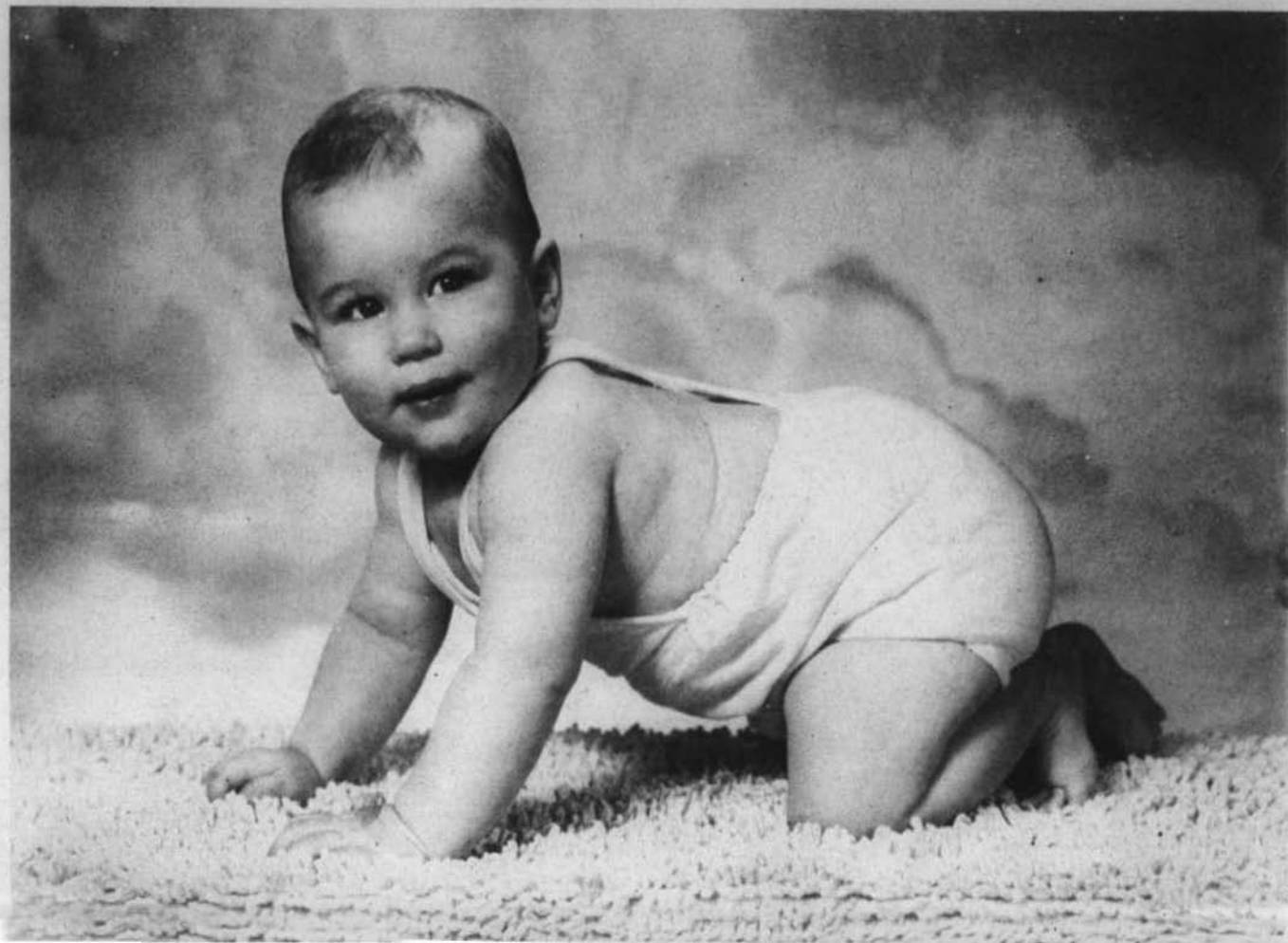
# *Florida* **HEALTH NOTES**



May  
1953

**A TERRIBLE FEW**

Vol. 45  
No. 5



# A TERRIBLE FEW

FLORIDA HEALTH NOTES discusses diseases, disease conditions and other health hazards in the ten issues that come out each year. It is not possible to cover all the many public health problems in Florida in these few issues; therefore, we usually restrict ourselves to those threats to our health which involve danger to the greatest number. Frequently those which are of the least importance numerically speaking are those which excite the most interest in the public press, radio, and other means of communication. They are the ones that frequently hit the headlines, and though naturally they cause great distress to those involved they are not classed as major public health problems. To cite a few: tetanus, rabies and leprosy.

In this issue of HEALTH NOTES we present a few of the interesting but less prevalent public health hazards in Florida today. They do cause suffering and anxiety and sometimes death — and can be controlled. There are others that could be included. But those discussed herein we hope will be read and noted because of their general human interest. We might call this issue **"The Grab Bag"** or **"Miscellany"** or one of another dozen names. We have compromised by titling it (aptly, we hope) **"A Terrible Few."**

\* \* \*

## WHOOPIING COUGH

Whooping Cough is often considered one of those inevitable childhood diseases which is not of great importance. But this is not true as can be seen by examining the number of deaths in Florida each year which can be attributed to this disease. In the last ten years the smallest number of deaths in any one year was 6 and this number occurred in 1949 and in 1952. The largest number of deaths was 72 in 1943. These deaths are particularly disheartening because we consider whooping cough to be a preventable disease and there are good means for controlling it. Most of the deaths from whooping cough are in infants under two years of age, so that it is extremely important that children be protected as early as possible.

It is thought best to immunize a child against this disease at from 3 to 6 months of age, but any young child who has not had whooping cough may be given the vaccine. It takes about four months for protection to develop. Some physicians give a triple immunization, popularly known as DPT—diphtheria toxoid, pertussis (whooping cough) vaccine, tetanus toxoid.

Although vaccine is not the only method of controlling whooping cough from a public health standpoint it is, by far, the most important. Many physicians are of the opinion that older children (especially when they start to school) should be given booster injections of whooping cough vaccine even though the mortality among this older age group is not great. The reasoning behind this thought is that the older children often transmit whooping cough to their younger brothers and sisters after being exposed to the disease in school.

Whooping Cough is a dangerous disease because an attack usually lasts for several weeks, during which the strength is severely taxed by persistent coughing and frequent vomiting. The child may become so run down that bronchopneumonia develops, and this is the condition that causes 50 per cent of the deaths following whooping cough. Special care is needed to restore lost weight and strength during an attack of this disease. A physician's instructions should be followed closely.

The number of deaths in Florida during the past three years has been relatively small in number, but the State Board of Health is anxious that the seriousness of the disease be understood by parents, teachers, nurses, and other groups so that not even one unnecessary death will be caused by this preventable disease. Early immunization is the best answer.

\* \* \*

## PSITTACOSIS

Psittacosis is a disease of birds which may be transmitted to man. This disease is found in parrots, parakeets, cockatoos, and other related species. The domestic hen and pigeon are also susceptible to psittacosis. The disease in humans takes the form of pulmonary infection or pneumonia. The history of any of these cases is of great value in diagnosing the dis-





ease, since there is a rather typical pattern which is as follows: There is sudden onset of symptoms which are characteristic of a typical pneumonia. There is a history of a parrot, or a pair of love birds, having been recently brought into the home as pets. Very often, in rapid succession, other members of the family become ill with similar symptoms and sometimes guests or visitors in the home will also be affected. The pet birds may or may not appear sick. There seems to be no characteristic set of symptoms in the affected birds but they may exhibit sleepiness, ruffled feathers, loss of weight, labored breathing, or other changes in behavior and appearance that is a deviation from their normal conduct.



Usually there is a two or three week period between the introduction of a bird into the home and the appearance of the first case of psittacosis in a human occupant of the house. Most of the cases occur during the winter months probably because of the lack of ventilation which allows prolonged exposure to the virus. Psittacosis may be endemic (always present) in the many aviaries in Florida. Early in January of 1952 the body of a dead parrot which had just died was submitted to the State Board of Health by a practicing veterinarian, and it was found that this bird had died of psittacosis. Soon after the State of Minnesota informed the State Board of Health that two human cases of psittacosis had been diagnosed in persons who had purchased a parakeet while vacationing in Florida. In order to determine the extent to which birds were infected in the many bird farms and pet stores in Florida, a survey was instituted in cooperation with the Communicable Disease Center of the U. S. Public Health Service. The survey disclosed that eight bird farms or pet shops had animals on display which were infected with the disease.

Although there have been human cases reported among persons in other states who have had contact with psittacine birds while vacationing in Florida, there have been no human cases diagnosed in our State since 1941. The explanation for this may well be that since birds



are taken to colder climates, chances of human exposure is much greater due to the lack of ventilation as previously described.

Because the psittacine birds become infected with this disease so easily a control program is difficult to set up that will eliminate the danger of human infection. However, the following points should be emphasized:

- 1—Persons who own, sell or raise parakeets should be alert to the symptoms of psittacosis in their birds.
- 2—Veterinarians treating sick birds should be cautious before ruling out psittacosis.
- 3—Practicing physicians should inquire about the psittacine or other bird contact of all their patients who have an acute pulmonary disease.

\* \* \*

## RABIES

Rabies is an acute infectious disease of animals which may be transmitted to man through the bite of an infected animal. Because this disease is often contracted by a human being through the bite of a dog, and because dogs have a place in our society as "man's best friend" there has been a great deal of misunderstanding concerning the exact nature of rabies. There are some persons who even deny such a disease exists.



Rabies is not a myth. The disease has a characteristic pattern which is actually more typical in its appearance than most of the other infectious diseases.

Rabies in man is one hundred per cent fatal. Therefore, prevention in animals is the only course of action at our disposal. It is possible to completely eradicate the disease if sane control measures are instituted. This has been done in some countries, notably England, Sweden, and Denmark.

In Florida the rabies problem has been gradually improving. Measures such as vaccination programs, and stray dog control has accomplished much in reducing the number of infected animals. During 1952 there were no human cases reported in this state, nor have there been any human cases since 1948 when one death was reported. The improvement that is shown by these figures does not mean that this disease does not still represent a real problem. There is always danger of human infection when rabid animals are present and in 1952 twenty-one animals were found to be rabid. Also the County Health Departments found it necessary to give Pasteur treatment to four hundred twenty-two persons. These people had been in contact with infected animals, or animals which were suspected of having rabies. The necessity of giving rabies vaccine represents a problem, (even though it may mean the difference between life and death in a person who has been bitten by a rabid animal), for the procedure is certainly not without danger in itself.

Although we usually consider this disease as one affecting dogs and, through them, human beings, all animals are actually sus-



A pet is being vaccinated to protect himself, his owner and the community.



ceptible to it. The dog is the usual source of human rabies and next in line is the cat. However, animals in wild life also become infected. In this area the most common are the raccoon, fox, and skunk. It is not even necessary to go hiking through the woods in order to be exposed to rabid wild life, since infected raccoons and foxes often leave their natural habitat while in the throes of the disease and appear in urban areas. It is interesting to

note that in other parts of the world rabid animals which are common to those areas often present grave danger to both humans and live stock. In Mexico, Trinidad, and Brazil the vampire bat has caused much economic loss by infecting live stock and there have even been a number of human cases of rabies traced to the bite of the rabid vampire bat. In Mexico the spread of rabies by this method has been gradually spreading northwards toward the border of the United States.



There are a few points that all of us should remember about rabies.

- 1—It is a specific infectious disease which is one hundred per cent fatal in man.
- 2—It is not necessary to be bitten by a rabid animal in order to contract the disease since infected saliva deposited on an area where there is a break in the skin will allow the virus to enter the body.
- 3—When a person is bitten by a suspected rabid animal these general procedures should be followed:  
Immediately wash the wound with soap and water. Then go to your physician who will report the incident to the health department. The animal should not be killed but should be observed by a veterinarian and isolated for a period of fourteen days to see if he develops the disease. Pasteur treatment is not necessary in every dog bite, but it can be a life-saving procedure if recommended by your physician.
- 4—Vaccination of your pet is essential to protect him and yourself.
- 5—Stray dog control is a "must."

## HANSEN'S DISEASE

Hansen's disease is the accepted term for that condition which for ages has been called leprosy. There is probably no disease known to man which has been feared as much as this particular one. Centuries ago those unfortunate people who were afflicted with it were cast out from their homes, separated from their families and were denied even the opportunity to keep themselves clothed and fed. The cry "unclean" was raised against them, and neighbors either fled from their presence or drove them away. Even today the mere mention of the word leprosy will instill fear in the minds of uninformed persons. It is probable that the term leprosy as used in ancient writings included many other diseases than the specific condition which today we call Hansen's Disease.

At the present time the chief centers of this disease are in certain parts of Africa, Burma, West Indies and the northern part of South America. However, it is wide spread and has appeared in almost every portion of the world at one time or another. In the United States isolated cases have appeared in various sections although the greatest number of cases are found in Louisiana, Texas and Florida. It is thought by many that the disease was brought to the Western Hemisphere during the period when the slave trade imported infected persons from areas in which the disease was prevalent.

Hansen's Disease although contagious is so only to a low degree. The experience of doctors, nurses, and other workers in hospitals used exclusively for taking care of Hansen's Disease has shown that a reasonable amount of care will prevent them from becoming infected. The disease cannot possibly occur in acute epidemics such as smallpox, measles, influenza, or the plague.

The United States Public Health Service maintains a hospital for the treatment of Hansen's Disease which is located in Carville, Louisiana. This hospital was established early in 1921 and has contributed much in making available more precise knowledge of the disease. It has also given hope that this ancient malady may some day be conquered. It is now possible for persons who some few years ago would have no hope for recovery to actually be discharged from the hospital as arrested cases. Many can return to their families and live essentially normal lives except for periodic observations by their physicians.

During the months of January through August, 1950, a survey of the Hansen's Disease situation in Florida was conducted by



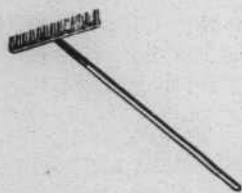
the Public Health Service in cooperation with the State Board of Health and local health departments. This survey revealed that during the period from 1921 to August, 1950, (a period of approximately thirty years), 134 cases of leprosy were known to have occurred in the State. Undoubtedly there were others which were not diagnosed so that the actual number of cases can not be obtained. Nevertheless, a study of the number of cases gives us valuable information concerning the status of the disease in Florida.

Of the 134 cases, 95 were Florida-born individuals. Of this latter group 79, (83 per cent), became infected in Monroe County. The remainder of the patients were located, for the most part, in Dade and Hillsborough Counties, although there was an occasional case located in twelve other Florida counties.

There is no reliable evidence as to when the disease made its appearance in Florida. However, the best available information suggests that it has existed in this section of the country for about two hundred years. The disease is not a major public health problem in Florida, and the number of cases occurring are few. The fact that there are new cases occurring however, indicates that there is a continuing need for a control program, especially in Monroe, Dade and Hillsborough Counties. The control of Hansen's Disease must be based on finding cases early, and isolation of those individuals who may transmit the disease to others. Since transmission of the disease depends upon prolonged and intimate contact it is best that infectious cases be admitted to Public Health Service Hospital in Carville, Louisiana, rather than remaining at home with the possibility of infecting other members of the family. Although persons in the immediate household of the infected individual are in more danger of contracting the disease, there is information available showing that infection has occurred in persons who had no contact with a case within the household, but apparently contracted the disease through relatives or non-relatives residing outside the patient's home.

\* \* \*

## TETANUS



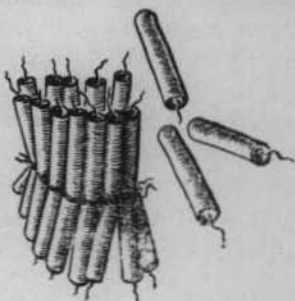
Tetanus (lockjaw) is an acute infectious disease which is caused by the toxin thrown off by the tetanus germ, called a bacillus. These bacilli are ordinarily found in the intestinal tract of horses, cattle and man; therefore

these organisms may easily be discovered in the soil where manure is used as a fertilizer, in other areas where cattle and horse excreta is deposited on the ground, as well as in the dirt of city streets and country lanes. Since these germs are found in the human intestinal tract it is possible for newborn infants to become infected with tetanus by contamination with the mothers' intestinal contents during the birth process. This condition is called "tetanus neonatorum" and is usually a result of contamination of the umbilical cord by unsterilized scissors used in cutting the cord.



Tetanus is a disease in which the tetanus organism itself is not directly involved but it gives off a toxic substance which is very powerful and which causes those symptoms which we recognize as lockjaw. This toxin is one of the most potent poisons known. The tetanus bacillus usually enters the body through a puncture hole or a cut, such as are made by guns, fireworks, nails, spikes, splinters, etc. If the wound is not cleaned and washed out the organisms are trapped within this area as healing takes place. The toxin is then produced and it has a great affinity for nervous tissue; it reaches the brain and the spinal cord and acts on the nerve cells causing spasms and convulsions. The disease is commonly called lockjaw, because affected persons are unable to open their mouths due to spasm of the jaw muscles. Other muscles of the face may be affected resulting in a curious facial expression as if the patient were smiling in the midst of great suffering. Sometimes the muscles draw up the corner of the mouth and raise the eyebrow. Other muscles of the body may also be affected and symptoms of the disease vary according to the different areas of the body in which muscle spasm is present.

When a patient has progressed far enough to have definite symptoms of tetanus in many of cases death will occur. The best and most effective way of preventing deaths from tetanus is to immunize every individual who may be exposed or who has already been exposed to the tetanus organisms. Many doctors now give tetanus toxoid to babies at the same time that they immunize them against diphtheria and whooping cough. They also recommend these injections for those of any



age who are exposed to a hazardous occupation such as farming, or highway work.

That these injections are effective can be shown by comparing the cases of tetanus during the Civil War where two cases of tetanus occurred for every 1000 wounds, and in World War I and II, when there was only about one case per 70,000 injuries.

Even though a person has been previously immunized a flesh wound acquired in a locality in which there is likely to be tetanus spores should be treated as a potential source of this disease. Gun shot and powder wounds are especially dangerous. Tetanus may develop in patients with wounds in which there is little bleeding, and these are the most common types of wounds. But any type wound may harbor the spores of tetanus. It is essential that all the dead tissue should be removed from the affected area of the skin and thorough cleansing be carried out by a physician. If the person has been previously immunized he may be given another injection of tetanus toxoid as a booster, to increase immunization to a higher level. If the person has not been previously immunized, tetanus anti-toxin may be administered. This gives only short-term protection.

Even though the occurrence of and death from tetanus has decreased, this disease still represents a serious problem in Florida where 46 cases occurred in 1952 — and there were 27 deaths among these persons — over 50 per cent. Since it is theoretically possible to prevent every case of tetanus it is regrettable that this disease must ever occur in man.

\* \* \*

## **ANTHRAX**

When an outbreak of anthrax occurred in Florida late in 1951, the State Livestock Sanitary Board swung into action with the speed of a fire department moving in on a three-alarm blaze. Right beside them were representatives of the Florida State Board of Health, watchful for human cases of the disease and making laboratory services available for speedy diagnosis of the disease in animal and man. Doctors, veterinarians, livestock specialists and animal laboratory workers realize that anthrax is one of the diseases especially dangerous both to animal and to man, with a death toll of up to 99 per cent in animals, and posing a major health threat to people.

Thanks to good diagnostic facilities, prompt quarantine of infected stock and their pasturage areas and the effective use of the new anti-biotic drugs, the outbreak appears under control. But the flareup of anthrax created a condition which will need watching for many years to come. The bacillus which causes anthrax is difficult to eradicate. Soil infected with the bacillus remains dangerous ground for many years to come. So while the outbreak may have caused economic hardship to livestock owners whose animals were infected, their cooperation in quarantine measures was the most important way to keep a dangerous disease from spreading.

Anthrax is an acute infectious disease found usually in grass-eating animals, principally cattle and sheep, and to a lesser extent in hogs, horses, and even such game animals as wild deer which may feed on infected grassland. The anthrax germs pass from the infected animal to man through the human skin, mucous membrane, lungs or intestinal tract. Most commonly, it is a skin disorder, where it penetrates a cut or skin abrasion. But the germs, entering the body by inhaling spores of the bacillus, or through the mouth to the digestive organs, can thrive and breed there. Multiplying in fantastic numbers, the germs infect the blood, bringing on death by septicemia or blood poisoning. Fortunately, antibiotic drugs are very effective in treating anthrax in people, but generally such medication is of no avail in treating animals since they often are dying or dead by the time it is discovered they have the disease.

What are the symptoms of anthrax in people? The disease has three principal forms, as follows:

1. Skin infection, characterized by the formation of dark-centered boils or carbuncles which develop and spread rapidly. Also noted are headache, joint pains, upset stomach, general debility and fever. In the days before the development of modern medicines, particularly the anti-biotics, about one out of five people were killed by this skin-infective type.

2. Pulmonary or chest, marked by a sudden attack, stiffness and fever, tight chest, difficulty in breathing, headache and general debility. Death may occur within 18 to 48 hours, making prompt diagnosis and treatment essential.

3. Gastro-intestinal: This type is fortunately rare in the United States. It is caused by eating infected food, transfer of spores from skin sores to mouth where they pass into the stomach, or



carried by the blood from skin or pulmonary infections to the abdominal area.

This disease, it might be added, is much less common throughout the world today than in ages past. Outbreaks still occur, however, from time to time, and some areas of the world apparently have **never** been free of the disease. In human beings it is largely an occupational disease affecting persons working with hides, furs, woolens, bone and other animal products. Veterinarians, butchers and leather workers may be frequently exposed to infection. A notable example of the mass spread of the disease occurred in the British Army some years ago when thousands of men became infected from the use of shaving brushes made in Japan.

Another way in which the anthrax bacillus can be carried from one area to another is on the claws and in the body wastes of buzzards which have fed on contaminated carcasses of animals killed by anthrax. It also can be carried from one ground area to another by rains and flood waters. Cattle from infected areas moved to another area may take the infection with them.

Strong control measures, with emphasis on quarantine and the abandonment of infected pasturages, are particularly important in Florida. Anthrax is known as a "seasonal" disease, generally breaking out in warm months, and subsiding during the "frost" months. Since Florida has no definite "frost line" the danger from anthrax can exist here throughout the year during warm winters.

The outbreak which developed in 1951 was the first time the disease had been noted in the State since 1935, when one fatal human case was reported. The 1951 outbreak was first diagnosed among cattle in Broward County. It later spread or was located in Dade, Palm Beach, Polk, Alachua and Duval Counties. Five human cases of anthrax were associated with the occurrence of the disease among animals. Of these five human cases, the sources of infection were contact with infected animal in three cases, a laboratory infection in one, and contact with a human case in the fifth instance. All recovered. All five human cases occurred in a matter of a few weeks after anthrax was first observed among animals. Prompt quarantine and control measures were instituted by the State Livestock Sanitary Board. Working in cooperation, the State Board of Health set up diagnostic facilities in the field and at the Central Laboratory in Jacksonville. No new cases were reported during 1952, but the germs which cause the disease are extremely hard to kill and can lay dormant in soil for as long as 40 years.



The source of infection which caused the sudden flareup in 1951 could not be determined positively, although imported raw bone meal used as a cattle food supplement was believed responsible. The suspected bone meal was known to have been shipped to each county where the infection occurred. At least three other states also reported the presence of anthrax after livestock owners had used this same bone meal. The present control measures consist of the following:

1. Quarantine of infected areas, which will continue as long as the State Livestock Sanitary Board considers necessary. Dead carcasses are burned in an effort to kill the bacillus.

2. Cattle and horses in areas of infection are being vaccinated to help make them more resistant to the disease. It might be noted that Louis Pasteur, the great French scientist whose work helped to make milk-drinking safer through the pasteurizing process to kill bacteria, also contributed much to the knowledge of anthrax and designed an immunizing serum for it.

\* \* \*

## **SNAKEBITE**

To the average person the sight of an adult snake, coiled and poised to strike, is one of the most blood-chilling sights in nature. The snake in folklore has always had an evil reputation. Very little good has ever been said of him until modern times when it was discovered that venom of several varieties apparently has some value in medical treatment of a number of physical ailments. Although several varieties of poisonous snakes can be found in Florida, including rattlesnakes, coral snakes, water moccasins and copperheads, your chances of dying of snakebite in Florida in any year are about one in a million.

As Florida residents continue to clear away more of the State's lush subtropical growth to make room for farms, orchards, housing developments, airports and other man-made improvements, the snake's natural habitat and breeding grounds are being erased. However, there are still many millions of acres of swamp, salt marsh and brush-clogged timberland left to afford him sanctuary.

Medical science has shown some progress in making the snake less dangerous to humans through its growing knowledge of the dangerous effects of snakebite and how these poisons can be treated to lessen their lethal effect. Snakebite serums have been developed, which have proved helpful in a number of cases, counteracting the physical effects of the poison on the human system, the final effects of which can cause death.



Because they cause such few deaths, snakes are considered a "minor" public health problem in Florida. But there is a possibility that this so-called "minor" problem could become much more of a threat.

Some snakes, even more dangerous than our own home-grown variety, are being imported for exhibition at "snake farms" and "serpenteriums." They could get out of their cages, make their escape to swamp or timberland, begin breeding and establish

themselves in the State. If they did escape, the Florida climate is so close to the native habitat of many of them (principally cobras) that they might propagate in this climate.

We might add that in addition to the importation of these snakes, there is another way they might reach Florida. That is through their accidental importation in cargoes from foreign lands which are unloaded at our ports.

This matter has been of considerable concern in recent years to the U. S. Public Health Service. Investigations of this problem have been made in Florida and several other Southeastern states where foreign poisonous snakes would be more likely to breed and to thrive.

After a meeting at the University of Florida of a number of herpetologists, or "snake specialists," one of the investigators stated: "there was considerable discussion of the question of public safety. . . . Opinion was strongly registered that some sort of regulation is needed to prevent dangerous snakes from falling into the hands of irresponsible or careless people. . . . Concern for the 'innocent bystander' was considerable, partly due to the actual physical dangers to which he may be subjected but more especially to the so-called 'mental hazard' which often exists where snakes are concerned. The frightening or terrorizing of people with snakes, accidentally or intentionally, was deplored as reprehensible. . . . The group agreed that some sort of licensing system should be put into effect to regulate the sale of dangerous exotic snakes.

"One animal exhibitor stated emphatically that purchasers of exotic venomous snakes should be required to obtain bond."

What steps should be taken to assure the safe handling of these dangerous reptiles? Many are of the opinion that laws or regulations on the state level would be the best solution. But an expert warns that a strict ban on reptiles might not be the best solution. "The importation of venomous snakes for study purposes and for public exhibition by zoological parks, as well as for other legitimate uses, should not be restricted more than is necessary to prevent the possibility of colonization."

What about these snakes? Are they as dangerous as they appear to be? The answer is definitely YES. Some countries, such as India, Africa, and some South and Central American countries find snakebites among the major causes of death. India, for instance, home of the dreaded "King" cobra, has approximately 20,000 snake bite victims annually. A number of smaller cobras

have been imported into Florida for exhibition and scientific purposes.

The State Board of Health Bureau of Vital Statistics reports that during the 13-year period from 1940 through 1952 an average of three persons per year died of reported snakebite in Florida. Of the 40 who died, 38 were white persons, two non-whites. How many persons were bitten and subsequently recovered could not be determined.

One more word about snakes — there are two definitely different varieties of snake poisoning. For instance, rattlesnakes, moccasins and copperheads, all found in Florida, are members of the viper family and produce a poison which attacks the blood. Death results from a breakdown of the blood cells. Coral snakes, also found in Florida, are members of the cobra family, which secrete a poison that attacks the nerves. Death results from nerve paralysis.

#### SPIDERS, TARANTULAS, ETC.

Snakes are not the only poison hazard to be found in Florida. There are such things as spiders, particularly the **black widow spider**; **tarantulas**, the latter usually imported in cargo shipments from Central and South America, where they thrive. Most Floridians are familiar with the poisonous qualities of the **toadfish**, **certain eels**; the **sting ray**, and the poisonous variety of **jellyfish** known as the "Portuguese man o'war," sometimes found in the surf along Florida's ocean beaches. Most of these are more annoying than fatal, with the exception of the black widow spider, which emits a poison somewhat similar to that of a cobra in that it attacks the nerves and has been reputed to have caused death in some few instances.

Increasing shipments of cargo, principally fruits and vegetables, from Central and South American ports which are being unloaded in growing volumes in Florida ports, offer tarantulas and spiders an opportunity to visit the Sunshine State. Bananas offer the best concealment for these creatures. Sometimes they are not detected until fruit reaches the retail markets, and occasionally may be carried home by purchasers.

photo of infant on page 102 by edith schiller-fehl

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#### FLORIDA HEALTH NOTES

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# The State Board of Health

1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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Governor of Florida

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Mental Health Program

All counties in Florida have organized county health departments except  
ST. JOHNS COUNTY

FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892



# *Florida*

## **HEALTH NOTES**



June  
1953

**HIGHLIGHTS: 1952**

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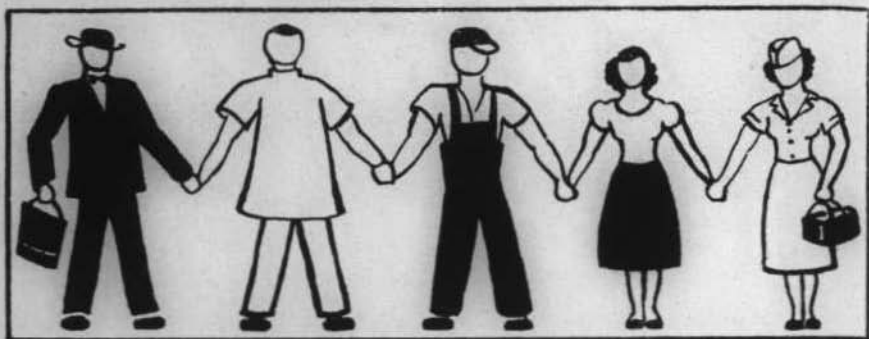
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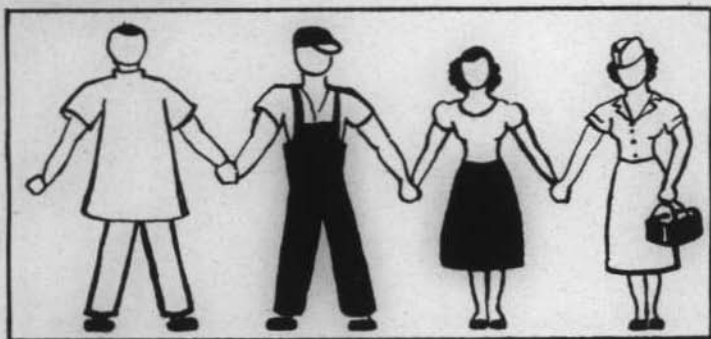
**"In nothing do men more  
nearly approach the gods  
than in giving health to  
men."**

*Cicero*

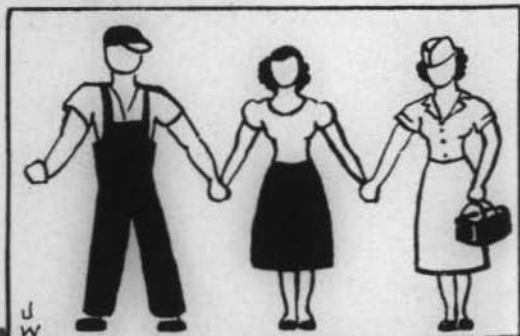
# Everybody



## Works

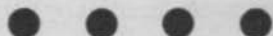


## Together



# HIGHLIGHTS -- 1952

## OF THE FLORIDA STATE BOARD OF HEALTH



Each year we publish a complete and detailed ANNUAL REPORT. It goes to libraries, county health departments, institutions, research organizations and other state health departments. But not only is it too voluminous and detailed for the average person to read — it's also too expensive to distribute widely. We feel, however, that **YOU**, the public, want an idea of what were some of the problems and accomplishments during the past year of **YOUR** State Board of Health — a State agency which acts as a leader, guide and consultant to the county health departments and other official and voluntary organizations which are concerned with the protection of the health of all our citizens in Florida.

If we are to give you the kind of service which you ask for in these health-enlightened days, we will need your intelligent awareness of the health problems in your State. To this end, we offer this issue of **FLORIDA HEALTH NOTES**.

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### FLORIDA HEALTH NOTES

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Let's talk about....

## **THE BOARD OF HEALTH**

■ The 5-man governing board (three physicians, a dentist and a pharmacist) and its secretary (the State Health Officer) met six times during the past year to fix policies and consider matters of administrative importance. Here are a few of the matters they considered:

The water supply problems at Cocoa Beach

New regulations concerning anthrax

Awarding emblems to employees with 20 and 30 years' service

Organizing a Division of Heart Disease Control

Approval of plans for a new building in Jacksonville

Forbidding professional employees to also have outside employment.



A few remarks concerning ....

## **COUNTY HEALTH DEPARTMENTS**

The Bureau of Local Health Service notes:

That the basic problem of the County Health Departments is inadequate funds

That the State provided 33.78 cents per person for health in 1952

That the Federal Government provided 7.07 cents per person

That only nine counties now contribute less than 50 cents per person

The Bureau is concerned with the fact that there:

Is only one public health nurse for every 8,330 persons  
(one per 5,000 is best)

Is only one sanitarian for every 15,123 persons  
(one per 8,000 is desirable)

The Bureau wishes to advise that:

A new addition to the family was:

The Collier County Health Department — October 1952

**Leaving only —**

One county without an accredited health department — St. Johns

The Training Center at Gainesville prepared seven health officers, 23 sanitarians, six nurses, and two clerks this past year for work in the various counties. [REDACTED]

Basic to all public health work is . . . .

## **MATERNAL AND CHILD HEALTH**

There was a remarkable decrease in maternal mortality during the year. Yet sixty-one mothers died in childbirth though the rate of 0.8 per 1,000 live births represents a 33 per cent decrease from the previous year.

2,548 infants died during the first year of life. ( That's a rate of 34.4 per 1,000 live births.)

Constant education of groups and individuals was continued by:

Annual obstetric (maternal) seminar in Daytona (doctors and nurses came from Florida, Georgia and South Carolina)

Short course in audiology (hearing) at the University of Florida.

Two institutes on premature babies—one in Miami, the other in Jacksonville

Incidentally, the Premature Demonstration Center at Jackson Memorial Hospital in Miami admitted 297 babies "born too soon" from Dade, Broward, Palm Beach and Monroe Counties in 1952.

We continue our interest in school children's health by:

Cooperating on every level with the State Department of Education. (This is an excellent two-way relationship)

Assisting County Health Departments to plan cooperative school health programs with local school systems

Assisting in the formation of School Health Planning Committees in various of the counties

Many phases of sanitation are covered by ....

## **SANITARY ENGINEERING**

This Bureau approved 59 sets of municipal sewage treatment plans — with a value of over \$30 million — 22 of these were completed and put in operation in 1952.

### **Water supply and treatment systems:**

- \* 144 projects approved (53 per cent increase over 1951)

### **Swimming pools:**

- \* 143 projects approved
- \* 355 swimming pools permitted to operate (only 250 in 1951)

Seafood sanitation: laboratory samples of water in which it grows, seafood, etc., doubled in 1952 — 3,000 as against 1,500 in 1951.

Food Handlers Training: a continual demand which was partially met — with 7,280 certificates issued in 1952 by the mobile school and the permanent programs in the counties. 189 establishments had 80 per cent or more of their employees certified.

....plus dozens of other activities, including inspection of bottling plants, drainage wells, and canning factories.

Two big problems which need more personnel and study:

Stream pollution and industrial waste surveys

Money and people are essential so....

## **FINANCE AND ACCOUNTS**

.... tells us who did the work and how much it cost.

The full-time employees of the central office of the State Board of Health and the County Health Departments numbered 1,317 in 1952. They are protected in their employment by the State Merit System.

The purchasing agent received 2,276 purchase requests and bought materials in the amount of \$606,149.66.

### **The money came from:**

State appropriations .....	\$2,456,538
Federal Grants-in-aid .....	1,324,788
Cities, counties, school boards, and private contributions .....	1,939,607
Total .....	<hr/> \$5,720,933

### **The money went to:**

County Health Units .....	\$2,992,393
State Board of Health — Basic functional activities .....	1,676,466
State Board of Health — Special projects and services .....	1,052,074
Total .....	<hr/> \$5,720,933

Bugs and like things....are the province of....

## **ENTOMOLOGY**

This Division, among other things:

Investigated 35 complaints, the majority against termite control firms

Issued 173 licenses to Structural Pest Control firms

Identified and reported 11,713,848 mosquitoes

Identified 992 rats and the 1,624 fleas therefrom in connection with a typhus survey

Recorded that for the first time since 1940 there were no reported deaths from typhus fever

Did research on mosquito flights, releasing two million radioactive ones, on two different occasions. (They learned a lot they never knew before about mosquitoes' habits!)

**But** — its major activity is:

Consulting and working with Mosquito Control Districts and County Health Departments on their mosquito, fly and other insect problems. There are 24 Mosquito Control Districts — two new ones were voted in, in 1952.



This is news from ....

## **NUTRITION AND DIABETES CONTROL**

The four nutrition consultants participated in 1,165 conferences, seminars, workshops, classes and clinics — all in an endeavor to improve the nutritional status of our people. (We have lots of non-poor people who are malnourished!) A number of colleges, the Florida Council for the Blind, and Florida State Prison were assisted with food problems.

**Insulin:** — 25,152 vials were distributed to 2,463 indigent diabetics at a cost of \$34,941.52. A study of 202 of these persons picked at random indicated that all were medically indigent.

**Testing for diabetes:** 20,212 persons, tested at the mobile trailer in a number of communities, revealed 114 with suspected diabetes. (They were referred to their private physicians.)

**Testing for hookworms:** School children in rural areas — 10,211 tested revealed 37 per cent had intestinal parasites; of these approximately 33 per cent were hookworm and 3 per cent ascaris (stomach or round worms). In the general population, the Bureau of Laboratories found approximately 12 per cent with these "ever-present worms."

Ever with us — the problem of....

## **DENTAL HEALTH**

The big subject in 1952 — **fluoridation**. News releases, mass meetings, recommendations, resolutions, broadcasts, community action, led to:

Fluoridation of the water supply of metropolitan Miami.  
(This makes 11 communities in the State)

Dental examination of 1,592 school children in Jacksonville, since this city has fluoride occurring naturally in the water. 44.5 per cent of the children examined had excellent teeth: no fillings, no decayed, no missing permanent teeth. (The figure in non-fluoridated areas in Florida usually runs 10 per cent or less)

The Topical Fluoride Demonstration Team (supported by the U. S. Public Health Service and the State Board of Health) served 14 schools in six counties, applying sodium fluoride directly to the teeth of 3,535 children.

The Mobile Dental Unit visited six counties and furnished complete dental treatment to 690 elementary school children (during the school year).

Hillsborough, Jacksonville, Palm Beach, Dade, Duval, Orange and Pinellas all had good dental programs, and, as usual, **education** as to the **prevention** of dental defects, was the watchword.

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Some 1952 facts about....

## **MENTAL HEALTH**

Interest in this subject grows by leaps and bounds, spurred by the activities of numerous official and voluntary agencies. It was decided to ask the State Legislature to appropriate a larger sum for this program so that the **prevention** of mental illness could be emphasized. There are eight Guidance Clinics (principally concerned with children) presently in operation in Florida. Where they are and the number they saw (or applications processed) in 1952 follows:

Miami	850
Jacksonville	202
Tampa	222
Orlando	320
St. Petersburg	461
Bartow	182
Tallahassee	341
Daytona	465

If only half of these people were helped so that they could lead normal lives in the future, what a saving of human resources! All the personnel in the above clinics, plus many other public health workers, plus volunteers, devote much of their time to **education** — pointing the way to good mental health.

A few remarks about....

## **PREVENTABLE DISEASES**

■ **Polio** victims were 663 (a marked increase in actual numbers over 1951). 58 per cent were in children 9 years of age and under

■ **Whooping cough** deaths dropped from 25 to 6

■ **Typhoid fever** cases increased from 31 to 46. There are 86 known carriers in the State, who are under supervision and are not permitted to work in food establishments

■ **Diphtheria** cases increased and 41 per cent were among children 4 years of age and under. (Immunize early!)

■ **Hansen's Disease** (leprosy) sent two citizens to the Carville, La., national hospital.

■ **Tetanus** (lockjaw) cases increased in 1952; as did catarrhal jaundice: 236, catarrhal jaundice cases as compared to 46 cases in 1951

■ **Malaria:** 43 cases were reported in Korean veterans; 6 cases were reported but not laboratory confirmed. It is believed that only one case has originated in the State since 1948.

Perhaps you want to know more about....

## **TUBERCULOSIS**

505 persons died from tuberculosis during 1952. That's a rate of 16.8 per 100,000 population as compared to the rate of 17.9 for the year 1951. Tuberculosis accounts for 50 per cent of all deaths from infectious diseases.

There were 11,172 cases known to the Bureau of Tuberculosis Control on December 31, 1952:

The greatest number of cases was in white men

There are far too many cases found in a "far advanced" stage of the disease — 701 last year

In spite of all the beds in our new tuberculosis hospitals, 1,938 known active cases remain in their own homes

382,004 persons received X-rays during mass X-ray surveys: 976 cases of tuberculosis were found; 123 were "suspicious"; 290 had other abnormal conditions in their chests (tumors, heart conditions, etc.)



A report from ....

## **THE BUREAU OF NARCOTICS**

No drug addicts were found among teenagers in any of our schools or institutions of higher learning in 1952. There was an encouraging decrease in the number of narcotic arrests as compared to 1951.

Continuous cooperation with all law enforcement agencies (FBI, Treasury Department, State Highway Patrol and City and County officers) results in excellent control of illegal narcotic traffic throughout the State.

This Bureau is also concerned with the registration and enforcement of laws relating to physicians, osteopaths, chiropractors, chiropodists and masseurs, and the State Drug and Sign Act (Pharmacy laws).

### **Recommendation:**

That the Narcotic Act be amended to include all synthetic narcotics.

A short report on . . .

## **VENEREAL DISEASES**

The Rapid Treatment Center in Melbourne was closed because it was found that patients can receive good treatment at regional centers on an out-patient basis — and it is less expensive.

Six Prevention and Control Centers are now operating in Jacksonville, Miami, Pensacola, Tallahassee, Tampa, and West Palm Beach. These centers seem to be meeting a real need and are well attended by those who need their care and are well staffed. Incidentally 58,643 persons were treated in rapid treatment centers in Florida from 1943 to 1952.

Syphilis and the other venereal diseases, although more easily controlled with modern drugs, are still with us. There were 439 cases of congenital syphilis reported in 1952. The total number of cases of syphilis increased from 9,445 to 10,824. This increase was probably due to the more intensive efforts that were made to follow up and examine contacts of known cases. Gonorrhea dropped from 12,709 reported cases to 11,809.

Cases admitted to the Florida State Hospital at Chattahoochee because of syphilitic complications dropped from 7.7 in 1940 to 2.1 per 100,000 population in 1950. This shows the result of case-finding and early treatment of the disease.

The facts of life from ....

## **VITAL STATISTICS**

On July 1, 1952 it was estimated there were

★ 3,006,400 people in Florida  
2,378,400 white  
628,000 non-white

### **BIRTHS:**

74,098 babies were born—the highest number on record  
(24.6 per 1,000 population)  
53,419 white  
20,679 non-white

### **DEATHS:**

29,197 persons died (9.7 per thousand population)  
21,676 white  
7,521 non-white

### **MARRIAGES:**

26,956 (219 fewer than in 1951)  
21,412 white  
5,544 non-white

### **DIVORCES:**

20,447 (an increase of 1,772 over 1951)

To give you an idea of the amount of work done by this Bureau in 1952: they processed 341,144 birth and death certificates, requests for copies, etc., and added \$96,705.00 to the State Treasury in fees collected.

Some news about . . .

## **LABORATORIES**

There are six regional public health laboratories (Miami, Orlando, Tallahassee, Pensacola, Tampa and West Palm Beach — a new one) and the Central Laboratory in Jacksonville.

In 1952, they performed 2,448,916 examinations, an increase of 99 per cent since 1946:

Syphilis tests account for one-half of all the tests done

Numerous intricate tests are done on suspected tuberculosis specimens

The number of examinations for intestinal parasites increased. Those worms again!

Research projects included studies of:

otitis externa (outer ear infections)

salmonellosis (intestinal infections)

unusual gonorrhea-like infections

improvement of tests for determining if water has been added to milk

There's this to say about....

## **VETERINARY PUBLIC HEALTH**

10 cases of **undulant** fever (brucellosis) were reported in humans in 1952. 8,221 herds containing 82,764 cattle were tested for Bang's disease (brucellosis in cattle) by various agencies and veterinarians and 1,627 reactors were found.

**Rabies:** 21 animals were found to be rabid: 12 dogs, 7 raccoons, one cat, one skunk. There were no human cases.

**Anthrax:** first diagnosed in cattle in Broward County (6 farms), was also found in Palm Beach County (5 farms), Dade, Polk and Duval (one farm each).

72 cases of equine encephalomyelitis ("blind staggers"), all fatal, were reported in horses. One human case was diagnosed.

**Psittacosis:** reared its head after a long absence with reports of several cases in birds. Of 105 parakeets examined, 14 were positive for this virus. No human cases were reported among Florida citizens, but three cases of psittacosis developed in residents of another State who had purchased Florida birds.



A few remarks on . . . .

## **INDUSTRIAL HYGIENE**

Consultants made 219 visits to 145 industrial plants. 66 studies of potential health hazards were made. The laboratory made 419 tests — many of them for suspected metal poisoning.

This Division investigated and recommended improved practices about such things as:

- Shoe fitting X-ray machines
- Periodic urine lead determinations on storage battery workers
- Smoke nuisances
- Dust arising from cement plant operations

NOTE: Occupational disease claims for 1952 showed that: out of 1,522 presented, 1,110 were for dermatitis (skin conditions) from citrus, alkali, solvents, etc.

There are a lot of ways to dispense . . . .

## **HEALTH INFORMATION**

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In this Division:

**The artist**, among other activities, produced approximately 150 original drawings, stencils, layouts, etc.

**The Film Library** circulated 4,010 films, which were shown 10,815 times to 707,010 persons (not counting TB audiences). The library consists of 213 titles with a total of 465 prints.

**Health Notes** was issued 10 times. Approximately 12,000 copies are mailed out each month.

**The Library:** 731 persons borrowed an average of 12 items each. 98 bibliographies were prepared and 1,354 reference questions answered. The librarian visited 26 medical libraries and medical organizations from coast to coast as part of a survey and report for the proposed University of Florida Medical School.

**The Intelligencer** — a house bulletin — was compiled and distributed to all official and voluntary health agencies.

**Pamphlets** — over 125,000 — were distributed.

**News releases** — totaled 211.

A list of Health Councils was compiled. We have 33 in Florida at the present time.

## **CANCER CONTROL**

4,186 Floridians died of cancer in 1952  
(It was the second leading cause of death)

5,333 cases were reported during the year.  
(But many cases seen and cured by private physicians  
are not reported.)

There are tumor clinics in Jacksonville (2), Pensacola, Orlando, West Palm Beach, Tallahassee, Ocala, Tampa, Ft. Lauderdale, Miami (2), Daytona Beach, Gainesville, Lakeland, and St. Petersburg. 1,673 patients were approved for State Aid (under the State Board of Health program) which pays for hospitalization and diagnostic studies. Eight patients were referred to the Oak Ridge Institute, in Oak Ridge, Tennessee, all these being particular types that special research and treatment might help.

● **and**

## **HEART DISEASE CONTROL**

A program concerned primarily with education of professional groups on newer aspects of heart disease was begun in June 1952.

Diseases of the heart and blood vessels caused 34 per cent of deaths from all causes in Florida last year. (318 persons per 100,000 population.)

Research in Pensacola and Miami on heart conditions in children continues.

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# The State Board of Health

1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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HON. DAN McCARTY

Governor of Florida

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Mental Health Program

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All counties in Florida have organized county health departments except  
ST. JOHNS COUNTY

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FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892

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***"... the State Board of Health at the threshold of its existence sought to inform the people of Florida of the needs and demands of proper and efficient health government . . . the HEALTH NOTES of the State Board of Health of Florida is designed to fulfill a mission of this kind. It makes no pretense as a medical pamphlet or to engage in abstruse . . . subjects of sanitation or hygiene."***

—From the 10th Annual Report, 1898.



# Florida

## HEALTH NOTES

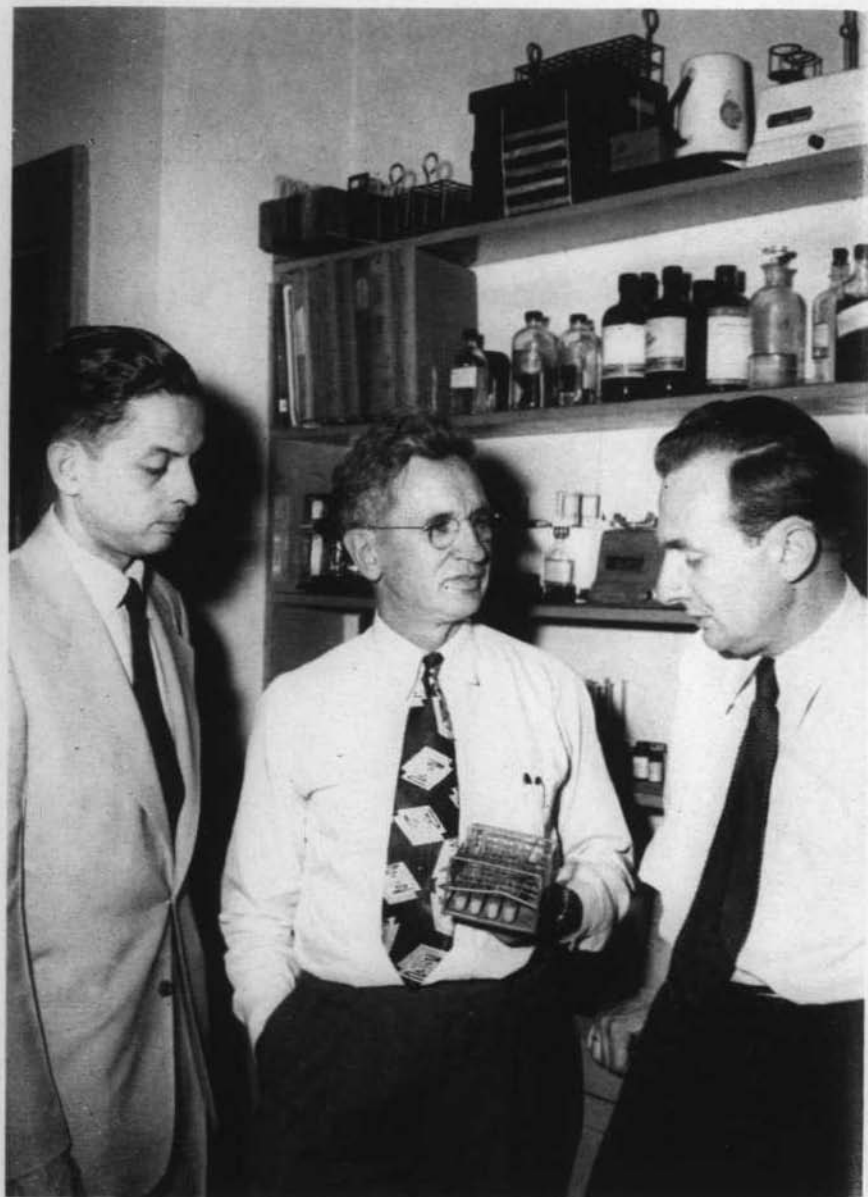


STATE BOARD OF HEALTH

Sept.  
1953

FLORIDA STATE LIBRARY  
FIFTY-YEAR MICROBE HUNT

Vol. 45  
No. 7



Medical men who come from different parts of the world may talk in different tongues, but they all speak the same language where public health is concerned. Here Siamese Prince Piya Rangsit (left), a veterinarian by profession, and Dr. Gunter Heinze (right), veterinarian in the Western, or "Allied" zone of Berlin, Germany, listen attentively as Dr. Albert V. Hardy, director of the State Board of Health Bureau of Laboratories, holds forth on a laboratory problem of interest to all three men. Dr. Rangsit and Dr. Heinze were among a group of foreign students who visit the laboratory in Jacksonville periodically for study and observation.

# FIFTY-YEAR MICROBE HUNT

It was the year 1903.

For Florida it was a year of hope — hope which was clouded with doubt.

After centuries of slow-going progress under flags of several nations, the State was at last beginning to emerge from her long pioneering period. Railroads were thrusting their questing steel fingers about the State's cities and towns, linking them into a swifter, commerce-spurring transportation network. Forest trails were being converted into roads. Farmers were rooting out the stubborn palmetto bushes to make way for more crops, pastures and citrus groves. The picture was bright with promise.

And yet as the axes felled the virgin timber and the sawmills buzzed an increasingly busy song of industry, doctors and other public health workers faced up to one important question: How could Florida conquer the health hazards which lurked in its semi-tropical wilderness? How could they create the healthy environment so necessary to the State's continued growth and development? How could the Sunshine State really take its place in the sun, to realize its golden destiny?

To the fledgling Florida State Board of Health, born itself only 14 years before with a yellow fever epidemic as midwife, the question seemed easy to answer then. Control the epidemic diseases and the State could grow large in population and rich in wealth, was the essence of the health agency's answer in those early days. But how could you control such diseases? How could you do away with yellow fever, malaria, smallpox, diphtheria, with typhoid and other communicable diseases which were causing much illness and death among the general population?

"One way is to learn more about them," was the State Board of Health's answer. And how to learn more about them, and to devise means for their control? By setting up a laboratory! The urgent need for this was emphasized in 1901 by the State Health Officer. He wrote "The proposition to establish . . . a bacteriological and chemical laboratory . . . outweighs all other suggestions at this time." Its development was delayed by "the calamitous fire" of May 1901. But in late 1902 the Health Officer wrote

## FLORIDA HEALTH NOTES

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"The Board has always fully agreed . . . that a laboratory . . . was desirable . . . but . . . there never was until this year available funds." The laboratory was authorized in August 1902 and the first specimen was accepted for examination in January 1903.

From its beginning the laboratory proved its value, both to the private practitioner and to the public health worker. In the first year of operation it performed 996 examinations on specimens sent in by physicians and others. (Fifty years later that promising infant laboratory had developed enough figurative adult bone and muscle to handle nearly two and a half million examinations yearly).

## **Where To Go?**

Providing proper quarters for the laboratory proved a problem from the start. A medical laboratory ranked in the minds of most people in the same category with a "pest-house," a necessary evil to be avoided at all costs, lest its presence infect others with deadly diseases. Finally Dr. John C. L'Engle, a far-sighted Jacksonville physician who could appreciate the usefulness of a medical laboratory, made quarters available in a building which he owned at Main and Bay Streets, site of the present J. C. Penney building.

Rapid growth during the laboratory's first years prompted the construction of the present State Board of Health building on Julia Street alongside the south bank of Hogan's Creek. The site was then known as "Raspberry Park." The City of Jacksonville donated the land. The site was accepted by the Board December 5, 1910, and a contract was awarded the W. T. Hadlow Company for construction of the present building in February, 1911. For more than 40 years the laboratory has occupied the first floor of the original State Board of Health building. Office space on the second floor was used by the State Health Officer and his staff.

The quest for proper quarters was not the only vexing problem the new laboratory faced. Delay in obtaining equipment also slowed the project. Said Dr. Andrade, the Director of Laboratories, in his first annual report for 1903: "Although a few specimens were examined during the months of January and February, the laboratory was not ready for work until March, much of the apparatus being delayed."

But with the arrival of the new equipment, the staff took heart. "As soon as the laboratory was properly equipped," Dr.

Andrade's report continued, "a circular was sent to all the physicians in the State, setting forth the purpose of the institution. . . ."

Contrasting the first year's total of 996 specimens submitted with the 1,313 specimens for the first-year operation of the New Jersey State laboratory, Dr. Andrade commented with considerable satisfaction:

"Comparing these numbers," he wrote in his annual report for 1903, "it will be seen that the laboratory has made a flattering success, so much so when we know that this kind of institution was entirely new in Florida, that many of the physicians were not accustomed to make use of microscopical aid in their practice, and the means of communication are not so frequent as in other places."

In commenting upon communications, Dr. Andrade touched on the reason for locating the laboratory and the State Board of

Milk from your dairy comes periodically under the watchful eye and skilled hands of this State Board of Health bacteriologist for routine checks on purity, butterfat and water content.





Health headquarters in Jacksonville. This city was — and still is — the hub of railroad and other vehicular traffic to most parts of the State.

E. M. Hendry of Tampa, President of the State Board of Health during the laboratory's first year, pointed out the "resourceful measures in disease-detection which the laboratory has supplied," and added: "I am quite confident that many lives have been saved to the State by the instructive help and assistance to the physicians in securing an early determination of the nature of 'coughs,' of 'fevers,' and 'throat trouble,' and 'intestinal disorders,' which at times assume a complicated condition and puzzle the best and most skillful of medical men. . .

"So firmly has the institute (laboratory) become indispensable in the daily life of the progressive physicians in my section that it has been suggested to establish sub-laboratories elsewhere, that they may be more accessible to the medical practitioner and of benefit to people of remote sections." It was not until 1910 that pressure of work on the Jacksonville laboratory prompted the State Board of Health to establish regional laboratories in Tampa and Pensacola.

Subsequently, regional laboratories were opened in Tallahassee and Miami (1914), and Orlando (1948). An effort was made to establish a laboratory in West Palm Beach more than 30 years ago, but after a building was erected for that purpose in 1921, plans were changed and the structure was used by the city of West Palm Beach Health Department, and more recently by the County Health Department as a public health center. A laboratory which the City Health Department organized there was transferred to the State Tuberculosis Hospital in Lantana in 1952, when the Tuberculosis Board, the City of West Palm Beach and the State Board of Health merged their activities to establish the bureau's newest regional laboratory there.

Affiliated public health laboratories are operated at St. Petersburg and Daytona Beach. A regional laboratory also operated for a short time in Key West, and a similar facility was set up in Melbourne to handle blood tests for venereal diseases while the Venereal Disease Rapid Treatment Center was in operation there.

## **The Chief Work**

It was largely at the insistence of Dr. J. Y. Porter, for many years Florida's State Health Officer, that the Board agreed to establish a public health laboratory. Dr. Porter at their meeting in August 1902, told the Board that "... the chief work" of the laboratory would be "to aid the physicians and the local health officers in the diagnosis of certain diseases; to detect tuberculosis; to determine when diphtheria cases may be properly released from quarantine." The laboratory also was needed "to examine blood smears for typhoid bacillus and malarial parasites; and secondary to this being the examination of water supplies and other investigations connected with public health questions. . . ." He added that it was apparent "without further argument that the laboratory of the Board should never be interrupted in those important investigations."

In stressing the need for the addition of a chemist to the laboratory staff, Dr. Porter said in his report for 1903, as he looked back on the laboratory's first year of operations, that: "The board stands greatly in need of a chemist for analytical examinations of water and food products which are suspected of impurity. Several times during the year (1903), the office has been requested to give assistance in this direction, and has regretfully been compelled to say that the Board was not equipped for work of this sort."

Continuing, Dr. Porter stated: "When the State Board of Health determined upon a bacteriological laboratory in 1902, as an adjunct to its sanitary work in behalf of the people of Florida, it hoped that the importance of the project would immediately interest all classes of citizenship of the State, especially the medical profession, by the value of measures which were proposed for the speedy determination of disease-organisms and by prompt, effective relief which such information must necessarily offer.

... It is aimed to make the laboratory a daily necessity to the busy practitioner. The physicians of the larger cities and towns have very generally availed themselves of the privileges of the laboratory which the Board has generously and gratuitously proffered the profession."

Was Dr. Porter's and the Board's optimism justified? The growing number of specimens sent in and the expanding roster of examinations provide an answer to that question. From the 996 examinations performed during 1903, the total jumped to 2,088 for the second year, reached 2,896 for the third year. The



Water, water everywhere — but is it safe to drink? This water laboratory technician can tell you sometimes in a matter of minutes if the water which flows from your faucet is safe — or dangerous.

total for 1908 was 4,006, and by 1910 when the two regional laboratories were established in Pensacola and Tampa, a total of 16,095 examinations were made.

Gaining almost steadily year by year, the laboratories passed the 100,000 mark in 1925. Fourteen years later the laboratories passed another milestone; during 1939, the total went past the 500,000 mark. The year 1941 saw another significant new peak: 1,188,612 examinations were made to surpass the million-mark. The two-million mark was passed in 1949, and in 1952, the laboratories were edging toward a new goal of two and a half million examinations as the year's total reached 2,448,916. In short, the laboratory work quadrupled from 1910 to 1920, trebled in the twenties and thirties and doubled in the forties.

## **Changes**

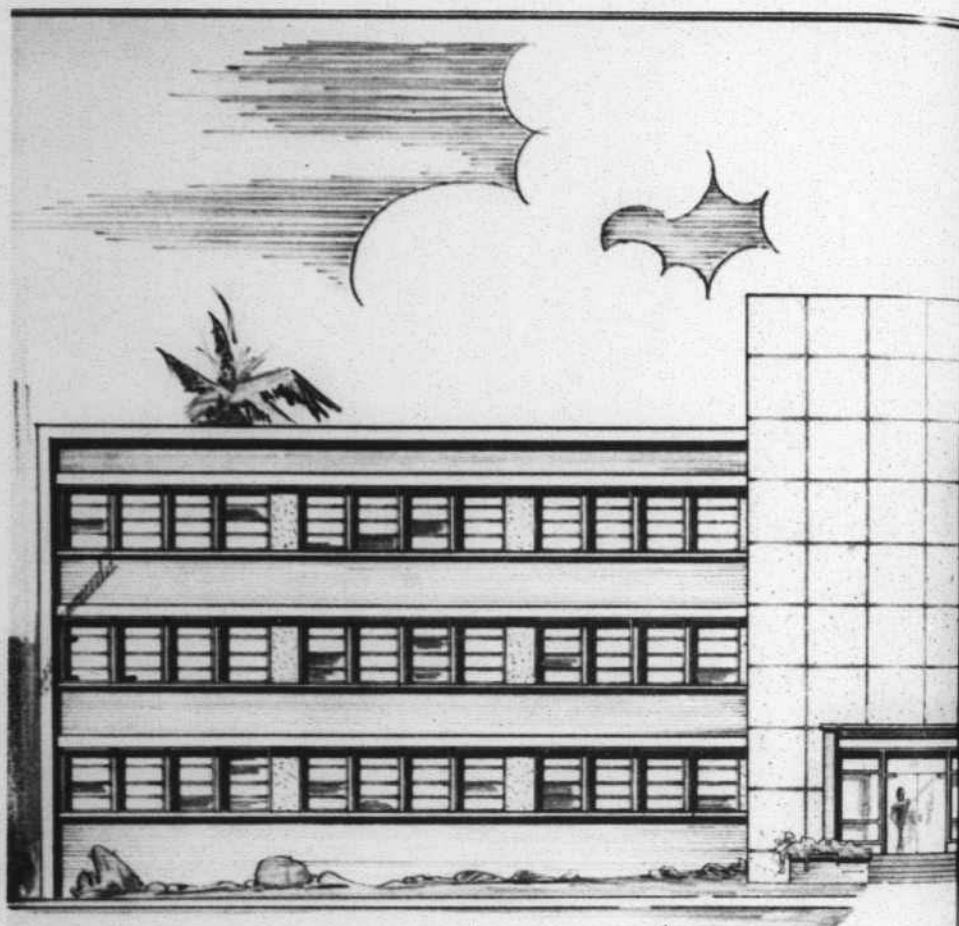
During the 50-year life of the laboratory, in addition to its phenomenal growth, there have been marked changes in the nature of its work. At first physicians used it as an aid in the examination of severely ill patients. A high percentage of specimens submitted were positive in the test requested. Now there is major emphasis on prevention, on early diagnosis, and on "case-finding." Thus at present, many of the specimens come from apparently healthy individuals. Food-handlers may be "carriers" of disease producing germs. Syphilis can persist for years in a "latent" stage, not making its presence known. The goal in the diagnosis of tuberculosis is to find it early before the individual has developed evidence of disease. In all of these the laboratory carries the major or sole responsibility for detecting the presence of infection. In its early days the laboratory served to aid in the practice of curative medicine; now its major objective is to foster the practice of preventive medicine by private physicians as well as by health officers.

In this era the new laboratory is acknowledged as an essential institution. A medical laboratory now is a part of all but the smallest of hospitals or clinics and many are operated independently by pathologists, clinicians, or qualified medical technologists. Each year new laboratories are organized. But the development of the first one fifty years ago was an unprecedented step. In recognizing the public health laboratory on this its fiftieth birthday, we do honor to a pioneer in the medical laboratory field.

## **Current Services**

What service does the public health laboratory give at present? In 1952 nearly 2½ million examinations were made to aid health officers, private physicians, veterinarians, sanitary engineers, law enforcement agencies and through them the citizens of the State. Let us look closely at some of the major activities.

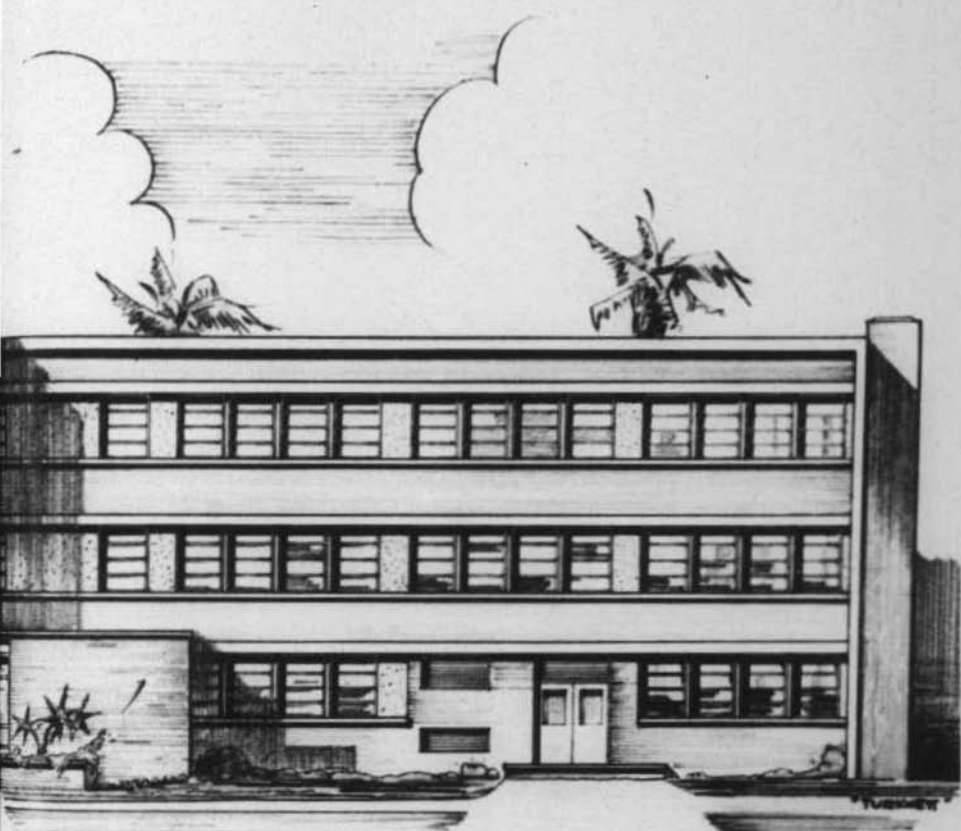
That blood specimen which the physician sent to the laboratory — what story might it tell? Will it reveal possible syphilis in a would-be marriage partner? Will an expectant mother be found infected with this disease that can cripple her child? Is the undetermined cause of a restaurant cook's illness actually typhoid fever? A study of the blood provides dependable evidence. You can find other things in the blood. In 1952, of 640,586 blood samples examined for syphilis 84,689 revealed suspicious evidence of the disease. With this information, those persons could then receive further examinations to establish diagnoses, and if needed



• FLORIDA • STATE •  
• A • DISTRICT • LABORATORY

THE CENTRAL LABORATORY'S





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## BOARD OF HEALTH · AND HEALTH CENTER ·

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THE NEW HOME IN FIFTY YEARS

they would receive rapid modern treatment to free them of a dread disease which could have far-reaching effects.

Other blood specimens studied in different ways reveal other information. Is that high temperature the beginning of typhus fever, undulant fever or tularemia? Many infections manifest themselves by changes in the blood, and tests on blood specimens are commonly employed by the laboratory in tracking down the cause of disease.

Bacteria, the mischievous members of Louis Pasteur's "little world" can be both good and bad. Some are useful and necessary in nature. Others can be ruthless and destructive in their effort to gain a foothold in the human body. The laboratory is constantly looking for and identifying these tiny unwelcome "hordes" with weird-sounding scientific names. One of these germs causes gonorrhea. Of 55,848 specimens for this disease in 1952, in 25,637 cases the organism of gonorrhea was found, indicating the presence of a venereal disease second only in importance to syphilis. That very ill child with a sore throat and fever — does he have diphtheria, streptococcus sore throat, or some other condition? The laboratory within a relatively short time can identify the causative bacteria and proper treatment can be started. Pneumonia, meningitis and dysentery are among other important diseases which can be tracked down and identified in the laboratory.

The death rate from tuberculosis, the "great killer," has been reduced rapidly in the past decade, and the laboratory has played its part in this public health success story. Highly-sensitive methods for actually growing tuberculosis germs have been developed and are in constant use in the laboratory. An incubator maintained at body temperature and as large as a small room will be literally filled with these growing germs, or "cultures" of tuberculosis. When necessary, laboratory experimental animals are used as a final test to confirm indications that the organisms really are disease-producing tubercule bacilli. Finding of the organisms of tuberculosis in an acceptable specimen serves to establish that the suspicious finding on an X-ray was really tuberculosis rather than some other condition. In 1952, 30,921 specimens of stomach washings, urine and other body fluids were examined, and in 4,826 instances the organisms of tuberculosis were found. (Many of these specimens came from persons who participated in X-ray surveys staged by the Florida State Board of Health and other agencies.) The infected persons then could be placed in a hospital under treatment as a result of this early diagnosis, and helped to regain their health and rightful place in society more easily and

quickly. Moreover, they then ceased to be a source for the spread of tuberculosis.

## **Food, Drink, Animals**

A holiday picnic ended with many sick, nauseated people. What happened? The laboratory can examine samples of the foods to determine if the bacteria of food poisoning are present.

The sanitary quality of water, dairy products, shellfish and food utensils in restaurants is the concern of every person, and of the public health laboratory. Quality standards have been set up by national, state and local agencies. The laboratory is able to determine if specimens meet these safe standards. The milk or cream you use, the water you drink or swim in, is it teeming with bacteria or of an acceptable quality? In that restaurant where you eat regularly, is the china and silverware "bacteriologically clean?" Were those shellfish which you purchased obtained from water free of sewage pollution? Day after day the public health laboratory is performing tests which serve to protect you, the public, from numerous health hazards of this type.

People may have "worms" in their intestinal tract. Some are dangerous while others are troublesome. The laboratory can identify which ones are present. In 1952, of 137,844 fecal samples examined for worms, 32,395 were positively identified as from persons harboring hookworm, pinworms, ascaris (large stomach worm), tapeworms or others not commonly found here, but which may be brought here from some area of the world which has other dangerous types of worms.

Animals, both domestic and pets, acquire diseases which are transmissible to man. Studies of animal diseases are rapidly being recognized as of substantial public health importance. Laboratory examinations are available for such diseases as anthrax, a disease principally of cattle but which can be transmitted to man, from which the State was free for many years until it was imported in 1951, probably in contaminated fertilizer. Since that time it has been a serious problem. "Creeping eruption," a particularly irritating form of skin itch which is difficult to treat, is transmitted to people by the dog and cat hookworm. Diseases of poultry, cattle, swine and horses, as well as of our animal or bird pets may be the source of human infections. Prevention demands that the public health laboratory aid in the detection of these infections at their source.

A child is bitten by an animal — the diagnosis, "rabies!" No other disease strikes such terror in the hearts of people. Unlike polio, rabies is always fatal unless preventive treatment is started in time. It was on June 24, 1953, that a county health officer in Florida received a call stating that a small child in the suburban area had been attacked in broad daylight by a leather-wing bat. The health officer sent the animal to the laboratory to be examined for rabies. Dogs, cats, foxes, coons, even mice, hamsters and pets of all kinds are submitted for laboratory examination when they die, so no one in the laboratory was surprised at the request for examination. Rabies in bats? Yes, it is known to occur in the "blood-thirsty" vampire bats of some Central and South American countries. But these bats do not inhabit the United States, and infected bats had never been found outside Central and South America. The bacteriologist who received the bat thought that this was another one of those recurring unusual requests and calmly set about his routine examination. On looking through the microscope at brain tissue from the bat, he was startled! The bat brain seemed to contain little "negri bodies," indistinguishable from those which indicate the presence of rabies in dogs, foxes, coons and larger animals. The remainder of the brain was sent at once to the Central Laboratory in Jacksonville, where a special breed of experimental mice are kept for rabies tests. As this is written, laboratory personnel admit, with their usual scientific caution, that they believe there is good grounds for the diagnosis of rabies — the first time it had ever been found in bats in this country.

## **Another Aspect**

Chemistry — without the work of the chemists the laboratory's service to the citizens of Florida would be incomplete. Chemical analysis of spinal fluid is important in the diagnosis of syphilis of the nervous system. The chemist checks on the "fluoride" content of water, its hardness or softness, and the kinds of minerals present, all important facts to the engineers responsible for the water you drink. In the solution of crime, the chemist performs valuable services. Was the unexpected death due to poisoning by a chemical agent? Those stains, "Exhibit A," are they due to blood and if so was it human or animal? Such information from the chemist is valuable evidence in a trial of justice. For without this evidence, many law-enforcement officers would have "no case" where the suspected commission of a crime is concerned. Does a cigarette suspected of having marijuana in it actually contain



Had a blood test lately? These laboratory workers are shown preparing blood samples for the meticulous tests which can tell the difference between "good" blood and "bad" blood.

marijuana? Only a qualified chemist can tell, and his testimony is vital to obtaining a conviction. The laboratory also checks on the suspected presence of other drugs, such as opium and its numerous derivatives, coca leaves and their derivatives, and the new, so-called "synthetic" narcotics.

Unlike many states, Florida has "no crime laboratory" as such. Often the State Board of Health chemistry laboratory gets calls from law enforcement agencies which need help. Modern crime detection is turning more and more to the laboratory for such help. The testimony of the chemist is often the difference between freeing an innocent man or sending a criminal to jail. But these additional tasks are throwing more of a burden on the chemistry laboratory staff. Would it be wise or advisable to make more



money available for this work? A growing number of law-enforcement agencies think so.

The laboratory of today would not be fulfilling its responsibility as a "watch dog of health" for the people if it were content to do its work using methods and procedures described years ago. Therefore it is constantly conducting studies to find new and better methods to speed and improve its services. Much of this and other investigative work is financed by special grants, rather than by State funds. The Bureau of Laboratories has several studies supported in this way.

## **Tomorrow**

This is the laboratory of the present, but what of the future? Those who had such high confidence in the value of the new and pioneering laboratory when it began its work 50 years ago would not have guessed the nature and extent of its development today. When its service began there was no blood test for syphilis; now the performing of these tests is a major activity of the Public Health Laboratory. In the years to come, undoubtedly, there will be equally far-reaching developments which will go far beyond our present expectations. Wise men of 50 years ago could not see too clearly into the future, nor can we today. But we do see problems and possibilities and these we may examine.

The most common and some of the most serious infections today are due to "viruses"—minute organisms so small they can be seen only by "electron microscopes" with magnifying power up to 130,000 times. We might add that polio or infantile paralysis, measles and the common cold, along with a variety of other diseases of all degrees of severity are caused by these tiny things labeled as "virus" infections. Practical diagnostic laboratory tests for these infections are beginning to be developed. In the future, studies of these infections may be expected to occupy a place of high importance in the public health laboratory.

The major task of the public health laboratory of the past has been to aid in the control of communicable diseases which affected the infant, child and young adult. Its major task in the future may well be directed to protecting the health of an aging population. The slow changes of "hardening of the arteries" and the sudden "heart attack" may be the result of chemical changes in the blood and tissues. Tests to detect these changes before they produce the irreparable damage will probably be found. It may be a part of public health of the future to provide simple "case-

finding" tests for many diseases, as already is being done for diabetes. By periodic tests of apparently healthy individuals, it may be hoped that those about to develop a chronic disease may be detected and then directed to their physicians for effective preventive medical care.

The scope of work of the public health laboratory of the future may be broadened. Service provided at public expense must be done both efficiently and economically. Consolidation of laboratory services needed by varying state agencies would be in the interests of economy. Service to the livestock interests and law enforcement agencies may be of more importance in our "State Laboratory" in the future.

In its first 50 years the public health laboratory provided diagnostic services; let us hope that in future years it may be able to contribute more effectively to the advancement of knowledge. This will be so only if there is adequate staff to permit some to devote major attention to special studies. Industry has found that it is sound business to invest in research; the same needs to be acknowledged by those who appropriate funds for our public health laboratories.

In this issue of Health Notes we have described the work of the public health laboratory. Its primary concern is to provide information which will aid in disease prevention and health promotion. The modern clinical laboratory, on the other hand, as found in hospitals and elsewhere, is a relatively recent development. Its primary purpose is to perform examinations needed by physicians to aid in the provision of medical care to individual patients. It is in the public interest that any assistance which will enable these laboratories to provide a better service be provided. A satisfying working relationship between the public health laboratory and many of the private laboratories already has evolved. The further development of this program is a task for the future.

Interest in what Florida's public health laboratory is doing has spread far beyond limits of its State line. For instance, a number of foreign students have visited the laboratory in recent months for the purposes of observation and instruction. Among those who have benefited by this free exchange of scientific knowledge include representatives from Brazil, Siam (or Thailand, as it is known today), Greece, Costa Rica, Western, or "Free," Germany and Japan.

The needs of our public health laboratory are simple and pressing, but are not unique, — personnel and facilities, and an ade-

quate budget to provide for these. The volume of work has expanded more rapidly than the size of the staff. More technical and professional help is needed, but more important, each person year by year must be enabled to become a better worker. An effective training program is essential and in recent years has yielded gratifying results. Florida may have a paternal pride in its sons and daughters who largely make up the able young staff of its Public Health Laboratories.

As if to properly celebrate the fiftieth anniversary of the laboratory, a new building to house the Jacksonville laboratory is under construction. Needs are being met. A growing and modern laboratory is becoming more of a reality for a growing and progressive State!

It takes a high-powered microscope to locate the tiny disease germs which can multiply with fantastic speed to cause food-poisoning. This is a view of the animal diseases laboratory.



# The State Board of Health

1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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HON. DAN McCARTY

Governor of Florida

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All counties in Florida have organized county health departments except  
St. Johns County

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***"Science, in obeying the law of  
humanity, will always labor to en-  
large the frontiers of life."***

—LOUIS PASTEUR



# *Florida* **HEALTH NOTES**



Oct.  
1953

**SCHOOL HEALTH**

Vol. 45  
No. 8



# SCHOOL HEALTH

FLORIDA is proud of her

- ★ Many new, well constructed, splendidly equipped schools
- ★ Large number of excellently trained teachers
- ★ The interest displayed in school health by citizens who are school board members, school trustees, and active participants in such organizations as Parent-Teacher Associations.

But these beautiful new schools, these fine teachers, this active citizenry is not enough — unless children who attend our schools are physically and mentally well. Too many children attend school half-sick, poorly fed, the victims of poor health habits. Some teachers have little interest or time in which to teach health. And there are school buildings that are not shining examples of sanitation and safety.

What can be done? Well, one way in which these obstacles to education may be overcome is by a good school health program.

## **Teamwork**

The responsibility for the school health program in Florida is shared by the State Board of Health and the State Department of Education. They, in turn, have delegated many of their responsibilities to county health departments and county boards of public instruction. This relationship is a mutually cooperative and helpful affair which has (among other things) produced the State Department of Education's Bulletin 4D — "A Program of Health Services for Florida Schools." This bulletin is an outgrowth of an earlier Bulletin 4, which proved to be so popular it was soon out of print!

The State Board of Health, the State Department of Education, certain of Florida's universities and colleges, and a number of vol-

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### FLORIDA HEALTH NOTES

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untary health agencies all contributed (in time of their personnel, money, etc.) to the production of Bulletin 4D which has just been printed and will soon be distributed by the State Department of Education to teachers throughout Florida.

Although this Bulletin was written for persons directly concerned with the school health program (teachers, public health personnel, etc.) we feel that it is of great interest also, to many other persons: parents, community leaders, just plain citizens — those who make up the HEALTH NOTES audience. Therefore, we have (with permission) abstracted certain portions of Bulletin 4D to present to you. PLEASE KEEP IN MIND THAT DUE TO LIMITATIONS OF SPACE MANY IMPORTANT DETAILS AND PARTS OF THIS BULLETIN HAVE NECESSARILY HAD TO BE OMITTED. THIS "ABSTRACTION" MERELY HOPES TO POINT OUT A FEW IMPORTANT PARTS OF THE JOINTLY PLANNED HEALTH PROGRAM WHICH IS CONCERNED WITH THE HEALTH OF ALL OF FLORIDA'S SCHOOL CHILDREN.

Read on . . . and learn more about desirable standards for school building sanitation, health services, health instruction.

\* \* \* \*

This bulletin is written for all those who are concerned with the health of the school child. Although the material indicates that the information will be used primarily by classroom teachers and other school personnel and public health personnel, it should be continually kept in mind that the important person in the health program is the parent. The primary responsibility for the child's health **remains with the parent**. The work of the public school people and public health personnel is primarily to complement and assist the parents.

Florida believes in the American way of living and accepts the challenge of planning and providing for programs of school health which will continue to develop and improve. The State Department of Education, the State Board of Health and voluntary health agencies cooperate in promoting and providing services for sound programs of school and community health. Their mutual contributions of energy, materials, and continuous understanding will play a major role in helping to establish adequate

school health programs and in helping to improve those programs already in existence.

The legal responsibility for **school health services** is vested primarily in the State Board of Health through its affiliated county health departments. The responsibility for **health education** rests primarily with the State Department of Education through the local school units. The **healthy school environment** is the responsibility of the local school board with consultation available from the local health department.





## **HEALTHFUL SCHOOL LIVING**

The ideals of every person are influenced by his surroundings, therefore the public school plant is the people's investment in the future. School children represent a cross-section of the home life of the community, therefore among them will be found the same health problems that exist in the community. The construction of the school building so far as environmental sanitation has to do with the transmission of disease and the physical and mental well-being of pupils is of utmost importance from the standpoint of public health.

### **School Sites**

Each site should be well drained, reasonably free from mud and the soil adapted to landscaping as well as playground purposes. Insofar as practical, the school site should not adjoin the right of way of any railroad or through highway, and should not be adjacent to any factory or other property from which noises, odors, or other disturbances would be likely to interfere with the school program.

The site should be accessible from every direction and to all parts of the population area to be served.

Sites should be located with due regard to traffic, the availability of bus lines, paved roads, and the possibility of future traffic problems. It is important from the public health standpoint in selecting a site that locations be avoided where the drainage is such that mosquitoes would be a problem or in the vicinity of slum sections or where the surrounding sanitation is below the best standards existing in the community. Where a public sewerage system is not available, the site should be selected with a view to the proper disposal of waste material.

### **Landscaping**

One phase of a wholesome environment that must not be overlooked in planning a school site is that of beautification. A spacious lawn, shrubs, and trees should be provided in front of or around the building. Shrubs and trees should be spaced and kept trimmed in order that they do not obstruct the source of natural light from any window area.

## **Playgrounds**

The playground should be so graded, surfaced, and drained as to permit the greatest possible use. A well managed sod should be maintained at all times on grass areas. Regular cutting, sprinkling, fertilizing, and seeding are vital factors in good maintenance. Courts and diamonds should be laid out so as to provide for a variety of activities in a well-balanced play program. All playground equipment should be so located that the children will be safeguarded as much as possible from moving parts. The equipment should be set in substantial foundations for maximum safety and should be inspected at regular intervals.

## **Sewage Disposal**

The most satisfactory method of disposing of school sewage is by connection with a municipal sewerage system. Where there is no municipal system, special facilities must be arranged.

The specifications for the septic tank given in the Florida State Sanitary Code may be used for small schools not exceeding 100 pupils. For larger schools, the sewage disposal installation plans should be submitted to the Florida State Board of Health for approval prior to construction. In all cases, the advice of the State Board of Health or the county health department should be secured on the method of waste disposal.

## **Building**

The trend today is toward one-story buildings. Insofar as possible materials should be used which are available and adaptable to that particular section. The building shall conform to the requirements of the National Board of Fire Underwriters.

## **Water Supply**

Water supplies for all schools should be constructed, operated, and maintained in accordance with regulations of the State Board of Health. The drinking water used in schools is of the greatest importance from a health standpoint. Where a public water supply is available, the school must connect with it. The safety of public water supplies is insured by state and municipal regulations and watchfulness. If it is necessary to develop a private supply for the school, it should be from a drilled well sunk so that the water is derived from deep seated sources.

The use of common drinking cups is unlawful. Where running water is available in the school, sanitary slant-jet drinking fountains should be installed in the ratio of one to every 100 pupils, but not less than two for each school; one inside and one outside and supplied with water under at least twenty pounds pressure. Drinking fountains should not be attached or connected to the lavatories because of crowding and possible contamination by splashing and dripping.

## **Classrooms**

**The temperature** in classrooms is very important at all times. Effort should be made to maintain consistent, comfortable room temperature. A favorable range is considered between 68 and 72 degrees Fahrenheit. The question of humidity requires special attention so that warm, fresh air will not be excessively dry. Air which becomes excessively moist will likewise create an unfavorable health situation within the classroom.

**The lighting** of classrooms is of concern both as an educational and health factor to the physical well-being of the children. As in temperature, either excessive or inadequate amounts of light are unsatisfactory to the desirable learning situation.

Appropriate tinting of classroom walls when planned in conjunction with lighting fixtures can provide an economic saving in the amount of light necessary within any given classroom. Where necessary to control direct sunlight, double shades originating in the center of the window and capable of being pulled both up and down are suggested as desirable.



All classroom equipment such as chalkboards, woodwork, and furniture should be considered. The use of green chalkboard has been found to be helpful in providing better lighting conditions within the classrooms.

It is important that glare be eliminated and light be evenly distributed throughout the entire room. Between twenty to thirty-foot candle power of light properly controlled will, in most cases, meet the needs of the children. This is a highly technical subject and the installation of lighting requires the services of a specialist. The importance of washing windows and keeping them free of obstruction should not be overlooked.

Great improvement has been achieved in utilizing the uniform high brightness available from natural daylight by **redecorating classrooms.**

## **Special Service Rooms**

**Health Suite.** Wherever possible, rooms should be designated for the many health services which require special accommodations within the school plant. Where only one room can be established for the use of health personnel, it must necessarily serve as a clinic room for teacher-nurse conferences, administration of first aid, examinations, and for isolation of youngsters who are suspected of having contagious disease. Lavatory and toilet facilities should be easily accessible.

Minimum equipment within the health suite should be a cot, sink, cabinet space for first aid supplies, a table and chairs, sanitary waste container, and scales. Other highly desirable pieces of equipment for such a health room would be a two compartment sink with a closed cabinet, additional tables and chairs, a sterilizer, a file for records, screens for isolation purposes, a footstool, bulletin boards, and a desk for the health personnel. Sufficient linen should be supplied so that the cots can be changed every time they are used.

Planned space with suitable connections of water and electricity should be made for mobile health units, such as X-ray, dental, etc.

**Teacher's Lounge.** It is essential that provisions be made for the health and emotional well being of the teachers. In doing this, it is recommended that a teachers' lounge be provided. Such a room is for the use of professional personnel for rest and relaxation during unscheduled periods. The room should be large enough to provide for chairs, sofa, bookcases, magazine racks, and

space for personal belongings of the professional staff. There should be toilet facilities provided as a part of the teachers' lounge.

**School Lunch Department.** It should be located on the first floor and accessible to a service driveway, the rest of the school building, and to the public for evening and vacation use without opening the entire school.

The type, size, and amount of kitchen equipment will depend upon the number served. As a minimum for a small department, a kitchen should include a heavy duty range, a three-compartment sink with adjoining soiled and clean dish space, a cook's table, a refrigerator, a serving counter, and a water heater capable of maintaining a water temperature of at least 120 degrees F. at all times when utensils are being washed. If the hot water method of sanitation is used, a hot water heater capable of a constant supply of water of at least 170 degrees F. is required.

**Gymnasium.** In the construction of a gymnasium, we should be mindful of the fact that the sole purpose of this building is not for the entertainment of the public but rather as an aid for the carrying on of a balanced health, physical education, and recreational program. Therefore, the floor area should be extensive enough to meet the needs of a highly enriched program. Shower, drying and dressing rooms should be of ample size and quality to meet state recommendations and provide realistic educational health experiences.

**Toilet Room.** Wherever possible, indoor flush toilets should be provided for public schools. At least one toilet for each sex should be required on each floor and the entrance to them should be well separated and clearly marked.





Toilets should be easily accessible from playgrounds and classrooms. Toilet rooms should be so located within the building as to provide cross ventilation and a maximum of direct sunlight within the room.

Handwashing facilities are essentials in all schools. Each toilet room should contain one lavatory for every forty pupils and at least two for each school. Soap and paper towels are essentials. Mirrors are very desirable. Lavatories for elementary grades should not be over twenty-five inches in height.

A janitor's sink should be provided near each toilet room so that the custodial officers will have a place to wash out their mops and rags.

## **Safety**

Too much emphasis cannot be placed on the necessity for a safe environment for boys and girls from the time they leave home in the morning until they return in the evening.

**School Safety Patrol.** School boys, and sometimes girls, are used in many schools to assist children across dangerous street intersections. The boys should not direct traffic from the street but work from the curb with flags. The flags should be placed on poles which the boys can extend into the street to stop traffic when children are ready to cross the street. Time should be given to the proper training of the school boy patrols so that they will be effective in their work and cause a minimum of slow-up in traffic.

**Safety Zones.** Attention should be given to provide stop signs, designed safety zones, and police patrol during congested periods. A hazard often overlooked by the school administration is that caused by the lack of sidewalks.

**Fire Protection.** In the construction and maintenance of any new school building and in the maintenance of any existing school building, special attention should be given to protection and safeguards from fire hazards. Any and all school buildings, two or more stories in height, which do not have fireproof or fire resistant stairways and corridors and adequate exits shall be provided with at least one adequate and easily accessible fire escape for each 250 pupils enrolled in the school.

Any school plant with six or more classrooms not protected by the services of a public fire department must be provided with

chemical fire extinguishers. Fire extinguishers shall be prominently exposed to view and always accessible. The principal of each school shall see that each extinguisher is recharged annually.

There shall be a place in a hall or corridor of each school plant, an alarm consisting of a bell or gong, arranged or equipped so as to be found at least at one convenient station or place upon each floor and of sufficient size and volume of tone to be distinctly heard in each room when sounded.

**Inspection.** It shall be the responsibility of the school administration to secure an inspection of the site, building, and equipment regularly for all hazards. The county health officers may be called on to perform this service.

**Supervision of play activity.** At all times that children are on the school grounds, adequate supervision must be provided. It is very important that proper organization and supervision of play activities before school, during free periods, and after school be recognized as a definite responsibility.



## SCHOOL HEALTH SERVICES

The county school board and local health department each have a legal responsibility for the school health program while the physicians and dentists of the community, together with voluntary and other official agencies also have an interest and concern with the program.

There should be a health appraisal of each child: to record accurate information for the teacher, nurse, parent and other interested persons; to identify the child who needs referral to a physician, dentist or agency for correction of defects; to identify children with non-remedial defects (epilepsy, cerebral palsy, etc.) who need special instruction. A school health record (of an approved type) is recommended for this purpose. These records should be filed and kept in the school at all times.

It is advisable that the school health records be kept in a permanent file in the classroom so that the teacher can have convenient access to the records and make daily or continuous observations or notations whenever something significant occurs. No records should be removed from the school. The records should be transferred with the child's cumulative folder when he transfers from one grade to another or to a different school. These records are confidential, permanent, and a part of the individual's personal history and should, therefore, be given the strictest of care.

The teacher is responsible for seeing that the health record is filed and kept up to date.

Significant illness or injury should be recorded for each pupil as it occurs.

**School Examinations:** During the school years pupils should have a minimum of four examinations. One at the time of entry into school, one in the intermediate state, one at the beginning of adolescence, and one before leaving school. Pupils who have serious defects or abnormalities, who have suffered from serious or repeated illnesses or who engage in vigorous athletic programs, require more frequent examinations. The physician is the best judge of the need for repeated examinations and of the frequency with which they should be given. Additional examinations, even annual examinations, may be arranged if money, time, and personnel permit, but the quality of medical procedures and judgment should not be sacrificed to a desire for frequent and complete coverage of the entire school.

All children entering a school system for the first time (in the first or any other grade) should be examined. It is preferable that this be done by a practicing physician and dentist. When necessary, it may be done by the school physician. **The parent should be always present when such examinations are done.**

Experience has demonstrated that medical examinations are most fruitful when the student has been specifically referred to the physician because parent, teacher, or nurse suspected that something was wrong.

The policy in Florida is to encourage parents to place children under continuous medical and dental supervision from birth, preferably under the care of a private physician or dentist. It is recommended, therefore, that these examinations be performed by the private physician and dentist rather than the health department except in cases of medical indigency.

## ***The Teacher's Part***

It is primarily the responsibility of the teacher to first "screen" her students for physical defects, before referring them to the public health nurse, or school physician.

**Height and weight** — variations are to be referred to if a child fails to gain over a period of three months. This condition should be looked on as only an indication that possibly the child may have health problems.

**Vision** — every child's visual acuity should be tested at least once a year. Most schools use the Snellen Chart. Conditions which may indicate visual disturbances: crust on lids and lashes, red eyelids, styes, swollen lids, watery eyes, apparent lack of coordinating eye movement.

**Hearing** — early detection of defective hearing is one of the teacher's responsibilities. The child may lose a considerable amount of hearing ability without being aware of the loss and hence fail to seek medical aid until too late. Symptoms often associated with hearing difficulties: discharging ears, earache, turning head to hear, asking others to repeat the conversation, inattentiveness, excessive noisiness, inability to repeat accurately things heard.

Indications of possible **teeth defects**: loose first teeth, decayed teeth, highly irritated gums, any sore in mouth that does not heal in two weeks, permanent teeth out of alignment, speech de-

fects, broken-down tooth roots, repeated absence from school because of toothache, poor mouth hygiene.

Indications of **throat disorders**: repeated attacks of sore throat, earache or discharging ears, chronic mouth breathing, enlarged glands in the neck.

It is desirable that a teacher learn to recognize signs and symptoms of **malnutrition**, so she can be alert to problems existing in the classroom. Changing eating habits is a slow process, but children's habits can be improved. Because of this fact it is felt that nutrition should be an integral part of the school curriculum. Teachers should refer children for further examination if any of the following are noted: abnormal nervousness or irritability, repeated absence because of sickness, evidence of abnormal fatigue, infections of scalp or skin, lack of general cleanliness, chronic or continual withdrawal from the group, retarded mental or physical development.

### ***Protection Against Communicable Disease***

It is possible to endanger the health of the school child through over-emphasizing school attendance, therefore school policy should not set too great a value on perfect attendance. Parents should be encouraged to make careful observation of their children before sending them to school in order to help prevent sending a child who might be in the first stages of a communicable disease.

The teacher is responsible for recognizing any child who shows any signs or symptoms of illness and referring him to the





## From the Foreword of "A Program for Schools" – Bulletin 4D, S

The Florida Department of Education in cooperation with the State Board of Health has published this bulletin for the information and guidance of all who have responsibilities for public health.

Health education and health services are public service areas in which school personnel may have a significant part not only in providing healthful pupil surroundings, but also in encouraging desirable pupil health practices and normal emotional adjustments.

The importance of the school health program cannot be over-emphasized. Properly conceived and intelligently implemented, the school health program may do much to assure strong healthy bodies and emotionally stable young people; failure to provide such a program may well contribute to the physical and functional inadequacy of our people.

Each teacher, supervisor, principal, county superintendent and others who are charged with duties and obligations in the education of children are in key positions to contribute. It is our hope that this bulletin will prove to be of help in planning the health programs for schools and communities all over Florida.

Thomas D. Bailey  
State Superintendent of Public Instruction

# of Health Services for Florida Department of Education

The efforts of the professions primarily concerned with the improvement of health, the prevention of disease, and the prolongation of life obtain their maximum benefit when applied to a citizenry which already has considerable knowledge of basic health principles. The interests of health departments and departments of education meet because of their common concern with the health of children of school age. However, there is a greater area of common interest due to the need for instruction of children in basic facts which will enable them to live healthy and happy lives in a clean and wholesome environment. In some areas of the world, modern medical and sanitary science is helpless in the face of ignorance and superstition in the general population.

It is the aim of this bulletin to aid the teachers in the public schools to further the enlightenment of our children so that succeeding generations will not only be more receptive to the practice of all that is known in the field of health, but will demand its full application.

Wilson T. Sowder, M.D.  
State Health Officer

proper person. It is an approved State policy that teachers shall give no treatment except first aid. Any child considered by the teacher to be ill should be isolated until he can be sent home. The county health department personnel should keep the school authorities informed about the evidence of communicable diseases in the local area.

## ***Immunization***

The school is responsible for the distribution and collection of permit slips for immunizations given in the schools. The State Board of Health recommends:

(a) That diphtheria-whooping cough-tetanus immunizations be given to children beginning at two months of age up to five years of age. A booster injection should be given about one year later and then again three years later if this combination is used.

(b) Smallpox vaccination should be done within the first year of life and preferably after the diphtheria-whooping cough-tetanus combination has been completed. A booster smallpox immunization should be given every three or four years and on exposure to the disease.

(c) Tetanus or lockjaw toxoid is advisable in combination with the diphtheria and whooping cough as stated above. However, it may be given beginning at about two months of age up to any age and a booster dose one year later; and then a booster dose every three or four years and after an injury such as a nail puncture.

(d) Typhoid immunization is not necessarily recommended



routinely except in epidemic areas and upon exposure. After the first series of injections have been received, a booster injection should be given every three years.

## ***Accidents and Sudden Illness***

Simple first aid and emergency medical care is the responsibility of the school personnel. The principal or a member of the school staff trained in first aid should be designated to care for the more severe accidents. Every teacher should be informed on standard first aid methods and procedures. Every accident treated, no matter how trivial, must have a written record. Each child's cumulative record folder should include information relative to the name, address, and telephone number of the local family physician.

The principal should assign one or more adults to be responsible for the transportation of sick children from the school to the home or hospital in cases where it is impossible for the parents to come for the child. This particular problem has been met in some communities by cooperation with local civic organizations, although the ultimate responsibility remains with the principal. First aid kits (one for each 300 children) should be readily available (but inaccessible to elementary school children) in adequate numbers. An instruction sheet showing approved procedures of first aid should be posted in each first aid kit. Each incident should be used as a teaching opportunity to promote prevention of accidents.

Suggested equipment for the first aid kit or cabinet: tincture green soap, an antiseptic such as tincture merthiolate, aromatic spirits of ammonia, an ointment for first degree burns such as vaseline, oil of cloves, band aid (1-inch), gauze bandage (2-inch), adhesive ( $\frac{1}{2}$ -inch and 2-inch), absorbent cotton, applicators, scissors, toothpicks, triangular bandages, thermometer, small basin, splints, (plastic or wood), table salt, baking soda, safety pins, glass, spoons.

## ***The Follow-Up Program***

The purposes of a school health program should be to eliminate and prevent defects as well as maintain and promote good health. The "follow-up" is most important because many corrections will not be obtained by the parents unless there is sufficient follow-up. Also, it should be remembered that weaknesses of follow-up is one of the major reasons why a school health program

is not successful. The facilities and resources available in a community must be completely known before a plan can be organized for a follow-up program and the problems peculiar to the local community must be understood by the health officer. The health officer with the school health planning committee should establish the plan and cooperate with the private physician. The entire program and especially the part of obtaining correction of the defects should be understood by the private physicians and have approval of the local medical society. The public health nurse, because of her close association to the family and relationship to the school, community, and health workers, has a major part in the follow-up work, as does the individual teacher. Remediable defects should be corrected early in the life of the child. Children with nonremediable defects should be helped to understand their limitations and to develop their optimum potentialities. Proper procedure for obtaining family-aid services should be familiar and understood by county superintendents, principals, and teachers as well as personnel of the county health department; parent interest in obtaining corrections should be stimulated.





## **HEALTH INSTRUCTION**

Home health education is the first learning experience in health that the child receives. So the health program of the school should supplement the health efforts of the home.

Health education of the child must be a planned part of the school health program in order that the understandings and practices of healthful growing and living may result. Teaching for health should be integrated into every learning experience the child has. Health is in itself one of the primary goals of education.

Learning experiences in health education are provided partly through attention to the school environment. The cleanliness and sanitation of the toilet facilities, water supply, school grounds, etc., have a direct influence on the student's outlook on such matters and his responsibility in helping to keep them clean. For example, the school lunch program provides opportunity for the child to practice habits of eating balanced and adequate lunches at school.

Health education can help children to appreciate the value of adequate medical and dental examinations and inspections. Children should be made to feel that they are a part of the health examination and must recognize results from it.

### **What to Teach**

Sound health education is the obligation of every teacher at every grade level in the elementary school. Before a teacher can plan an education program for children she must have an adequate understanding of each child's health needs and interest, which is basic in determining what to teach.

The teacher, planning a health instruction program, might ask herself among other things:

How do health situations in the local school show the need for health education?

What are the findings of the health examinations of the children?

What are the health practices in the homes of the children?

What have been the previous health learning experiences of the children?

What are the health and safety hazards in the local community?

What current health events or problems indicate leads for needed health education?

What do statistics reveal concerning the most important health problems in the State?

The desired learning experiences in health for each grade level will be more interesting and effective for both teacher and pupil when they select from these experiences:

Those which will improve general health; those habits and actions which are prompted by the child's response to those around him; those interests in personal appearance which may make the child more responsible for self; those protections which should be afforded the child and those which he can provide for himself; those experiences which encourage the child to broaden his interests, appreciations and participations in living more healthfully.

Emphasis in health education at the **kindergarten-primary** level should center around everyday living experiences.

In the **elementary** schools the specific health problems of particular groups will vary, but the teacher should be able to adapt most of the needed health instruction according to the "persistent problems" at the various grade levels.

At **Junior high** school level, it is recommended that *Everyday Living*, State Department of Education Bulletin 29, serve as a guide for health education. Approaches to the course are made through the life problems involved in the student's adjustment to his school environment and friends, to his home, and to his community.

At **Senior high** school level it is recommended that health be emphasized in biology courses, or provided for in a special course in health education, or integrated into the existing course of studies. Whatever procedure the school chooses to use, it is recommended that a balanced program be provided which would include for all students experiences in such problem areas as: making the most of yourself; understanding habit forming drugs and alcohol; understanding ourselves: growing into maturity; outwitting disease hazards; controlling the environment to protect health; assuming individual responsibility for group health; learning to drive; eating adequate meals. These subjects are covered in *Effective Living*, Bulletin 4B of the State Department of Education.

## ***Finding and Using Health Resources***

In every community there are people, places and things which may be used to make health education an effective experience. Children learn from all they see, hear, or do, whether this experience is planned or just happens. People are important resources for health instruction: specialists, parents, community leaders. Books, magazines, newspapers, films, charts, radio and television offer rich possibilities. A visit to the county health department may offer children a better opportunity to understand the services and role of this agency. Other field trip possibilities are:

- Bakeries
- City or school incinerators
- Community and commercial canning plants
- Custodial and correctional institutes
- Dairies and creameries
- Day homes or special schools for children
- Dental clinics
- Experiment stations
- Family service agencies
- Federal Housing Authorities
- Fire department
- First aid rooms
- Food freezing plants
- Grocery stores
- Health departments
- Health laboratories
- Hospitals
- Laundries
- Manufacturing plants
- Nursery schools
- Police departments
- Restaurants
- School busses
- School lunch departments
- School playgrounds
- Home garbage disposal
- Home lighting
- Home food preservation and storage
- Home water supply
- Home safety
- Home gardening
- Sewage disposal plants

Utility companies  
Vegetable and meat packing plants  
Water works  
Welfare departments

Every school library should provide a central index of the people, places and things available for teaching and learning. Each county health department has numerous pamphlets on various health subjects, in some instances suitable for both teachers and students.



## **INITIATING THE SCHOOL HEALTH PROGRAM**

**Each school** should establish a School-Community Health Council. The size of this committee will be influenced by the size of the school and the community that the school serves. **Each county** should establish a County School Health Planning Committee including community, school, and county health unit representatives. The committee will thus allow for representation of both official and voluntary agencies.

The County School Health Planning Committee will provide the type of organization needed to bring about desired results through cooperative planning in which objectives for the school health program are realized. Cooperative planning is the keynote for the continuous, harmonious working together of personnel of the schools, county health department, and voluntary and professional agencies. All recognize that the total health of the child in his life situation is the paramount objective of any school health program. No complete school health planning can be successfully carried out without the support, understanding, and active participation of both the school and county health department. The committee may be composed of a cross section of persons in the community who by the nature of their professional duties are interested in health problems; for example, representatives of the schools, the county health department staff, county, medical and dental societies, social welfare agencies, and other public and voluntary agencies interested in and concerned with health. This type of organization can be most helpful in securing concerted action.

If efforts to plan and organize a successful school health program are to be realized some one person must be charged with the responsibility of coordinating all efforts toward this end. Ideally, this Health Coordinator should be a school person qualified and experienced in health work. This person should possess the quality of leadership and the "know-how" necessary to keep the County School Health Planning Committee aware of immediate and long-range problems and should keep abreast with successful practices used in other communities. In his hands should rest definite responsibility for the total school health program and for cooperation with and coordination of the school health program with all other agencies interested in and vitally concerned with community and school health.



The County Superintendent of Schools and the County Health Officer should take initial steps in setting up such a committee. The County Superintendent of Schools should select school representatives to meet with the County Health Officer and his staff and together they should select a Health Coordinator. In many counties it may not be possible to employ a person whose full responsibility will be to serve as a County School Health Coordinator. In such cases, this responsibility should be delegated to someone who is already employed by the school or someone may be employed who is qualified to perform other duties in the county school office in addition to those of County Health Coordinator. Some counties have used their County Supervisor of Physical Education, Health and Safety as the County School Health Coordinator.

Throughout the entire undertaking it should be recognized that the schools and the county health departments are governed by certain legal restrictions and established policies and procedures. These restrictions should be thoroughly understood by both groups so that each organization can supplement and complement the work of the other. The County Health Planning Committee should promote, implement, coordinate, and advise.

Within the individual school a School-Community Health Council should be formed to provide a simple, orderly and convenient organization for determining wise school policies for immediate and long-range needs. Each school should designate a member of the faculty other than the principal as School Health Coordinator. The amount of responsibility that this work would involve will vary depending on the size of the schools. This should be considered a part of the individual's teacher load. This



person should serve as chairman of the School-Community Health Council, which will function along the lines of a continuing committee within the individual school organization. In small schools, this committee may simply be composed of a teacher, a parent, and the public health nurse. The committee, through its chairman, should cooperate with the County School Health Planning Committee. Even though the principal delegates responsibility to his School Health Coordinator, he should realize that the school health program will become an effective instrument for solution of health problems in the school and community only to the extent that he visualizes their importance and encourages the development of sound health practices among his faculty, the student body, and the community. The principal himself must first be convinced of the value of a complete health program. His interest and enthusiasm is the chief force behind the entire program. The encouraging results achieved by other schools as well as the obvious need for such a program in every school, should inspire him to action.

Under the supervision of the School Health Coordinator, a survey should be made of the immediate school health needs. This should be done before the committee is formally organized in order that its purposes and scope may be more clearly identified. The following is a list of projects that are likely to present themselves to the council:

- \* Survey of community health agencies operating in the county and the services rendered by them. The result should be better understanding and use of these services of voluntary health agencies such as the Tuberculosis and Health Association.
- \* Cooperation with special education projects.
- \* The installation and use of a system of accurate and up-to-date cumulative health records.
- \* Integration of the health education program with the general school curriculum.
- \* Planning and equipping health clinics in schools.
- \* Studying the causes of accidents and developing a plan for the prevention of accidents.
- \* Improvement of library material on the subject of health.
- \* Study of problem of excusing students from school activities because of individual health problems and encourage the de-

velopment of programs of activities suitable for students faced with such problems.

- ★ Continuing in-service education for teachers and other school and health personnel.
- ★ Assist in the establishment of training courses for custodial personnel.
- ★ Coordination of the School Health Service Program with other community health programs. This is particularly important in the correction of physical defects found among school children.



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All counties in Florida have organized county health departments except  
St. Johns County

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SCHOOL HEALTH PROGRAMS EXIST  
FOR THE BENEFIT OF THE **INDIVIDUAL**  
**CHILD**, EVEN THO SERVICES AND IN-  
STRUCTION FOR HEALTH OFTEN ARE  
ORGANIZED TO REACH CHILDREN IN  
GROUPS.

# *Florida* **HEALTH NOTES**



Nov.  
1953

**WORMS - - STILL WITH US**

Vol. 45  
No. 9



This is the approximate size of a hookworm.

What a small thing —  
to have caused so much sickness

- cost so much money
  - affected the lives of so many people
  - for so many years!
- Yet about 3 out of 10 children still have hookworm in Florida today.

***Let's Get Rid of Hookworm!***

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#### FLORIDA HEALTH NOTES

Published monthly except July and August on the 5th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. Entered as second class matter, Oct. 27, 1921, at post office, Jacksonville, Fla., Act of Aug. 24, 1912. It is intended primarily for individuals and institutions with an interest in the state health program, public and private. Permission is given to quote any story. Clippings of quotations or excerpts would be appreciated.

## THESE ARE THE FACTS

**HOOKWORMS**—are small worms about the size of a tiny hair. They hook themselves inside your bowels (intestines) and live off your blood.

**HOOKWORMS**—sap your blood and your strength. They keep you from getting the good out of your food. You may become anemic, unable to work and play and study like people enjoying good health.

**HOOKWORMS**—do you have them? The way to find out is to get a container from your health department or private physician, put a little bowel movement in it and have it examined.

**HOOKWORMS**—you get them when some part of the body (usually the bare feet) touches the soil that has become polluted by bowel movement that has hookworms in it. **Wear your shoes.** Have a **sanitary toilet** and **use it.** If you have hookworm, be treated by a doctor.



## **THIS IS THE STORY OF HOOKWORM**

Hookworm infection probably existed among the ancient Egyptians. The disease was described in Italy, Arabia and Brazil long before the cause was discovered in 1838.

In 1886 hookworm was found in patients dying with tropical anemia. In 1878 it was discovered that infected individuals could be detected by the presence of hookworm eggs in the human's stool.

Hookworm disease was recognized in the United States as early as 1845, but the type of worm found here (*necator americanus*) was not described until 1902.

**HOOKWORM** (*NECATOR AMERICANUS*)  
**WHERE FOUND IN THE AMERICAS**



## **THE HISTORY OF HOOKWORM IN FLORIDA**

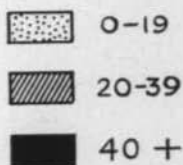
Hookworm infection was recognized as a health problem in Florida as early as 1903. From then until 1909, the first active anti-hookworm campaign was carried on by the State Board of Health. The first survey was made in 1910 and showed that 58 percent of 6,155 persons had hookworm.

In 1926, the Rockefeller Foundation conducted a hookworm survey here (in cooperation with the State Board of Health). The results showed 56 percent of 1,911 white rural school children had the infection.

In 1937-38, a third important hookworm survey was made by a group of organizations (Vanderbilt University, State Board of Health, Rockefeller Foundation). This study revealed 35 percent of 29,064 white persons (children and adults) had hookworm at that time; 20 percent of 4,121 negroes also were infested.

Incidentally, the first county health department in Florida was established in Taylor County in 1930 because of the prevalence of hookworm and malaria in that area. Malaria has been practically eradicated; hookworm is still with us.

**1937 - 38 survey**



## TODAY — WE STILL HAVE HOOKWORM IN FLORIDA

True, we do not have as much hookworm disease today as in the past. But we still have **hookworm infestation** as can be seen by the map on the facing page. And twenty hookworms in the body can remove as much as one pint of blood in one month.

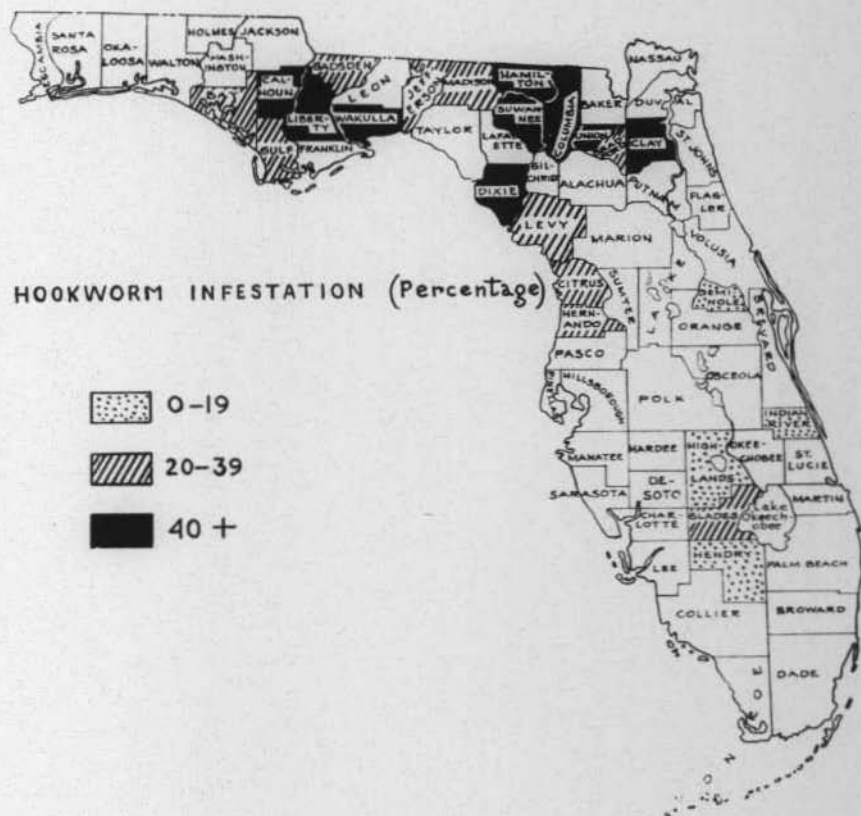
We know that hookworm infestation is usually chronic and the infected individual ordinarily shows no acute symptoms. Infestations may be

1. **Light** (approx. 1-25 hookworms) — the blood is replaced, no obvious symptoms; however, there is lowered resistance to disease.
2. **Moderate** (approx. 26-100 hookworms) — blood loss not completely replaced; lack of energy (both physical and mental), undernourishment, anemia.
3. **Heavy** (over 100 hookworms) — physical exhaustion, swelling, shortness of breath; abdominal pain; heart failure.



# HOOKWORM SURVEYS

June 1951 - May 31, 1953



## **LIFE OF THE HOOKWORM**

Adult hookworms live in the small intestine of a person

... hook themselves to the lining of the intestine where they suck blood for food.

... the female lays about 10,000 eggs per day; these pass out of the body with the stool (feces).

... the eggs hatch into very small larvae or worms if there are ideal soil, moisture and temperature conditions, which most of Florida has.

... these hookworm larvae can live in the soil for 2 or 3 months but in 5 to 8 days have developed enough so they can penetrate the human skin (usually the tender part of the foot) sometimes causing "ground itch."

... these larvae may be spread over a wide area by rain, wind, animals and other mechanical means.

... after getting through the skin, the hookworm larvae go into the blood stream, on to the heart and into the lungs.

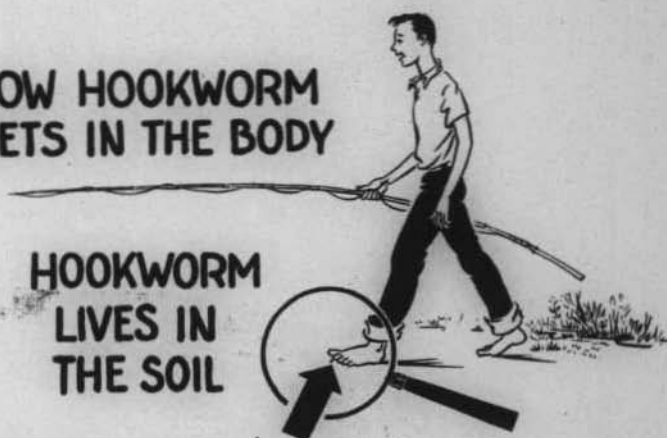
... here they break out into the air sacs, crawl up the windpipe to the throat, are swallowed, pass through the stomach into the small intestine.

... the hookworm larvae become mature adults about 2 weeks after reaching the small intestine and may live there 5 years or more unless dislodged by treatment.

... where they begin once again the vicious cycle — go back to the top of this page!

## HOW HOOKWORM GETS IN THE BODY

HOOKWORM  
LIVES IN  
THE SOIL

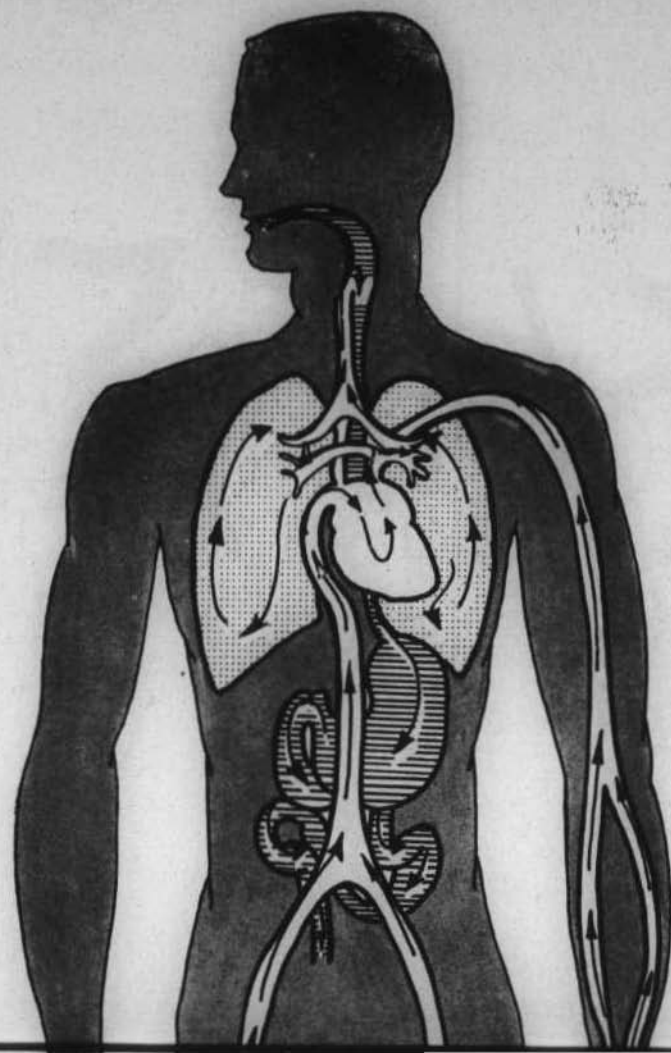


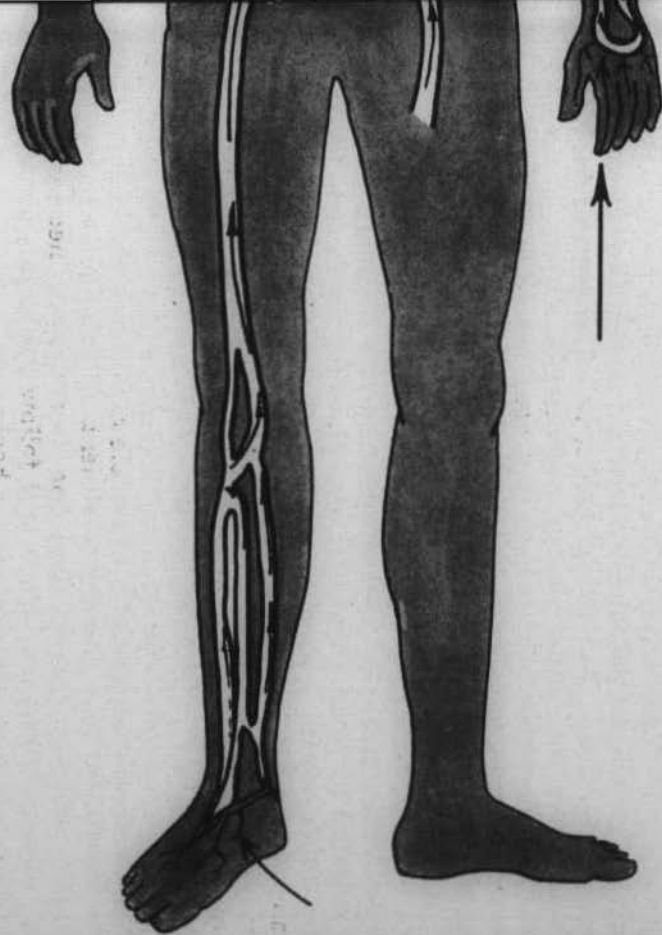
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## HOW IT PASSES FROM ONE PERSON TO ANOTHER



IT PASSES FROM  
THE BOWEL AND GETS ON THE GROUND, EITHER  
FROM AN INSANITARY PRIVY, OR BECAUSE SOME-  
ONE USED THE GROUND AS A TOILET ....





**How the Hookworm Enters and Travels Through the Human Body**



## HOW TO GET RID OF HOOKWORM

We've said it before and we say it again — it's no disgrace to have hookworm — but it's a disgrace to keep them! Not only does your body suffer, but you may pass them on to someone else.

You can get rid of hookworm. There are several drugs which doctors give for them. These drugs used to be called "vermifuges" and many were sold under various trade names. Many of our readers will remember how, in days long ago, "vermifuges" were given regularly in the spring, usually followed by sulphur and molasses!

Today drugs given to expel worms from the body are carefully selected by your physician, who gives for hookworm (or for any other worm) a specific medicine that affects that particular parasite. It is dangerous to take just any medicine, for you may have more than one kind of worm, and a drug that kills one variety may cause you a lot of trouble internally.

In some instances, especially in remote rural areas, the county health department may give the treatment. If you have a heavy infestation sometimes more than one treatment is necessary. These second or third treatments will follow the stool examinations which still show the presence of hookworm.

## **FOOD AND HOOKWORM**

To help you recover from the effects of hookworm disease — or any other disease — the right kind of food is important

If you have hookworm, or have had it, you may be a little anemic and you will need to eat an adequate diet. Use generous amounts of food rich in protein, vitamins and minerals. These foods will help you build good red blood.

For PROTEIN use meat, fish, poultry, eggs and milk. Florida ranks high in beef production. It offers an abundance of fish — all for the catching! Get busy — get protein in your diet.

For VITAMINS and MINERALS use fresh fruits and vegetables.

When you think of fruit, think of citrus — oranges, grapefruit, tangerines. Florida produces more than all other states combined, but many of us do not use citrus fruits. They are rich in Vitamin C and this vitamin helps us build blood.

We are the nation's winter vegetable garden. Florida produces an abundance of green vegetables. Most people in Florida do not eat enough of these. Learn to eat a variety of green vegetables. They contain iron and iron helps us build blood.

## **WAYS TO PREVENT HOOKWORM**

- **Wear Shoes.** Keep hookworm from penetrating the tender skin between the toes.
- **Keep stool off the ground.** Have good sanitary facilities and use them. Connect toilet facilities to a sewerage system, or have a septic tank or use a sanitary pit privy. Don't put chamber pot contents on the ground.
- **Know where hookworm is in the community.** Act accordingly — don't allow children to play where there is a chance they may pick hookworm up.
- **Treat hookworm.** If all who had it were adequately treated, we wouldn't have a problem — because then no one could "pass it" on to others.
- **Do something about hookworm — stimulate your community to act — in the interests of better sanitation.**

## **OTHER AIDS**

- **Good health habits.** General cleanliness of the body and good sanitation practices around the home.
- **Adequate diet.** Balanced meals will do much to keep hookworm from getting a toe-hold in the body.

# WHAT KIND OF SANITARY FACILITIES SHOULD WE HAVE? AND USE?

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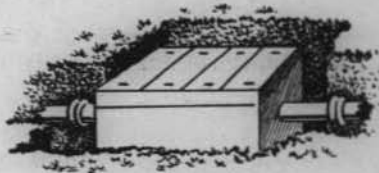
BE CONNECTED  
TO A SEWER  
LINE

*the best* →



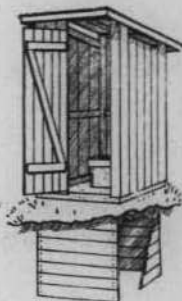
HAVE A  
SEPTIC TANK

*next best* →



HAVE A  
SANITARY  
PIT-PRIVY

*satisfactory* →



- Some folks think it isn't nice to talk about hookworm in public.
- Some people are so "modest" they don't want to collect a stool specimen.
- Some people are afraid to be treated for hookworm.
- Some folks think that one treatment will rid them of worms.
- Some people do not see the need for good sanitary facilities.
- Some folks won't use any kind of sanitary toilets (bushes and streams are not recommended).
- Some communities have too many persons suffering from malnutrition, complicated by hookworm, even though money is not a factor.
- Some teachers don't see the necessity for teaching about hookworm.
- ◆ Some communities know about hookworm, but don't act together to fight it ("let George do it").
- ◆ Lots of people think hookworm is no longer a problem in Florida.



## **COMMUNITY PROBLEM, BECAUSE:**

It's the only way we can learn about, fight and conquer this disease.

It's the only sure way to find out if you have hookworm.

We must teach that new drugs, given under a doctor's care, are safe.

They must submit at least 3 stool specimens which are negative, following treatment.

Education is the answer: to point out the dangers to others as well as themselves. An adequate disposal system is necessary whether you live in town or country.

Once again: education to understand the need, the danger to the community from polluting the soil; establishment of better health habits.

A good nutrition program: balanced meals, learning to eat new foods, understanding the relationship between food and a healthy body. An adequate diet is thought to increase resistance to hookworm.

Alert, healthy children are easier to teach. Good health habits, including the prevention of hookworm, are often learned in school.

A community or school health council can make surveys, determine need, work out solution.

You just give them one of these **HEALTH NOTES!**

## **... THERE ARE OTHERS**

### **ASCARIS**

There are other intestinal worms besides hookworms. One of the most common in Florida is ascaris or common round worms. They are also known as stomach worms. They are large white worms and can easily be seen in the stool. Occasionally they are vomited or crawl out of the mouth or nose.

Ascaris is not contracted like hookworm. The eggs are passed in the stool. If they are deposited on the soil, they mature and become infectious in two to three weeks. After the eggs become mature they can be carried to the mouth by dirty hands or in food and water. In order to prevent ascaris everyone must wash his hands before eating and keep stool off the ground. This will prevent the pollution of food and water.

There are drugs that can be given by a physician to get rid of these worms. Good sanitary habits will prevent infection.

### **PINWORMS**

This infestation is usually found in children, though adults often have it, too. The worms usually leave the body at night and cause intense itching, especially around the rectum. Scratching — to stop the itching — usually results in pinworm eggs getting on the hands or under the nails. When the infested person handles food, eggs are transferred to the food. Thus infection occurs. Eggs may be left on night clothes and bed linens and in this way may be conveyed to the person handling them.

Pinworms are very annoying because of the intense itching that they produce. This may result in loss of sleep and cause nervousness. Various drugs and enemas are recommended by physicians for treatment.

Persons who have this intestinal parasite must observe rigid personal cleanliness. Underwear, night clothes and bedding should be properly laundered to insure the destruction of eggs.

## **DOG AND CAT HOOKWORM**

There is another strain of hookworm that does damage to man. Dog and cat hookworm do not go into the inner body of man but they do produce a skin disease known as creeping eruption (*larva migrans*). When the dogs or cats who have this particular type of hookworm soil the ground where a human being plays or works, some of the larvae (the first stage of the hookworm) enter the skin, making a reddish blister at the point of entrance. These larvae move between the layers of the skin — sometimes as much as two or three inches a day — and produce a reddened pathway. This itches a great deal and often when it is scratched, it becomes infected.

Creeping eruption is common in Florida and quite difficult to cure. The best way to prevent this disease is to keep dogs and cats off beaches and out of public parks; eliminate hookworm in pets; control stray animals; and see that the grounds around your home are kept clean and sanitary.

"... demonstrated hookworm ova (eggs) to Dr. .... and the school trustees. Drove across to Winter Haven. Had long conversation with Prof. .... on subject. Put it up to him good and straight about some of the schools not having water closets and the way others were being neglected. Discussed at length the pollution of soil, etc. He furnished me with a list of hookworm suspects according to characteristics recently published in HEALTH NOTES."

"Came back by Crockersville. Prof. .... kept his school in waiting for us over an hour. He was most enthusiastic. Had had the disease himself and taken treatment. Was the cause of many others throughout the country being treated."

"High Springs —after investigating the small pox case, ... the major portion of my time was spent working upon the hookworm proposition. An inspection of the public school was made. Of the 90 pupils present at least 75 were advised to have the microscopical examination made."

"Went before the county school board which met in Prof. ....'s office. Carried microscope and specimens. Made talk on the situation."

From a travel diary, 1910, of Dr. C. T. Young, Ass't to the State Health Officer.

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All counties in Florida have organized county health departments except  
St. Johns County

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### 1908 - SAME PLEA - 1953

***"So you see that while we don't know how many . . . are infected (with hookworm), we do know a large number are . . . and that while the poorer families furnish the greater number of them, yet not all, for they come from every walk of life. And we know they are numbered, not by hundreds, but by thousands. It is in behalf of these sufferers from a disease very destructive to life, very disastrous to development, very easy to recognize, very inexpensive to treat, and very quick to recover, that I appeal to you. . . ."***

(From a paper read by Dr. Hiram Byrd before the State Teachers Association, Dec. 31, 1908.)

# *Florida* **HEALTH NOTES**



Dec.  
1953

## HIGHWAY HOMES

Vol. 45  
No. 10



# HIGHWAY HOMES

Big trailer coaches roll down Florida's highways. Zipping around them go the cars — tagged with license plates of all colors and shapes.

The motel industry grows at the rate of \$800 a minute in our Sunshine State.

A quarter of a million people sleep in Florida motels in one peak-season night. They spend over two million dollars a week. In a year, they'll use 50 million little bars of soap. In a day, they'll use 300,000 sheets.

Wagging their homes behind them, trailerites pour into Florida by the thousands. In the first six months of this year almost 160 million dollars worth of trailers were sold to persons eager to "hit the road."

Our motels and trailer parks accommodate all kinds of people, but mostly they are filled with folks who have come to Florida to enjoy life. Highway homes are happy homes. And they must be healthy homes. Here is where the State Board of Health comes in. This issue of HEALTH NOTES is dedicated to keeping them that way.

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## FLORIDA HEALTH NOTES

Published monthly except July and August on the 5th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. Entered as second class matter, Oct. 27, 1921, at post office, Jacksonville, Fla., Act of Aug. 24, 1912. It is intended primarily for individuals and institutions with an interest in the state health program, public and private. Permission is given to quote any story. Clippings of quotations or excerpts would be appreciated.

Motels came up the hard way. But they have definitely arrived. Prim and trim, they decorate the Florida highways. Many are as swank as anything you will find at Miami Beach. In fact, you will find them at Miami Beach. Not only do they accommodate the traveler while traveling, but many house him when he gets where he is going. People like to stay in motels, for lots of reasons.

Once known as "tourist camps," they began to make their appearance shortly after the automobile established itself as a more or less dependable means of transportation. The early courts were usually thrown-together huts. Just a place to sleep, with no facilities. "A room and a path" was all they offered. In the west, one of the most famous was operated by a tall, tough gent with notches in his gun. At his big log cabin, tired travelers could stop to sleep and cook their own meals.

Nothing very stimulating occurred in the motel business until the depression. Then people started moving around looking for work. They wanted a cheap place to stay. Shanty "tourist camps" began to multiply along the roadside. But, unfortunately for this expanding new business, the courts attracted more than tired travelers. Gangsters, bootleggers and prostitutes began to use the huts as hangouts. "Nice people" who could afford them continued to take their business to hotels.

Vigorous effort on the part of motel and automobile associations finally dispelled the bad reputation of the "tourist camps." The name was changed to "motor courts," since replaced by "motels," although Florida law still defines them as "tourist camps." The construction, appearance and service improved.

The war, creating a housing shortage and big shifts in population, brought lush years to the motels. Travelers continued to frequent them after the war. They liked the convenience of stepping out of the car and into their room, with no palms to be crossed during the operation.

"The growth of the motel business is nothing short of spectacular," declares Dr. Donald E. Lundberg, head of the Department of Restaurant and Hotel Management at Florida State University and author of books on hotels and motor courts. "The curve for the total number of motels since World War II is almost straight up."





The complete bathroom — a feature of many new trailers.

He states that in Florida alone, motels are being built at the rate of three a day. The State, because of its heavy tourist influx, is second only to California in the number of motels it boasts. At last count, there were 4,574 in Florida with 74,053 rental units. Motels all over the United States total about 45,000, representing a six billion dollar investment. Pinellas county leads our State with 496, followed by Volusia with 369, Palm Beach with 346, Dade with 298 and Broward with 257.

Two motels now under construction in Dade County will cost about a million dollars each. Each will have a complete sewage treatment plant.

Florida's income from motels last year was over 125 million dollars.

## ***Rolling Homes***

The trailer park, too, has risen above a humble beginning. It's a big factor in the State's hospitality business. The trailers themselves are, of course, one of the main reasons. More and better ones come on the roads each year. Some are really mansions on wheels, equipped with everything found in a house, including a bathroom.

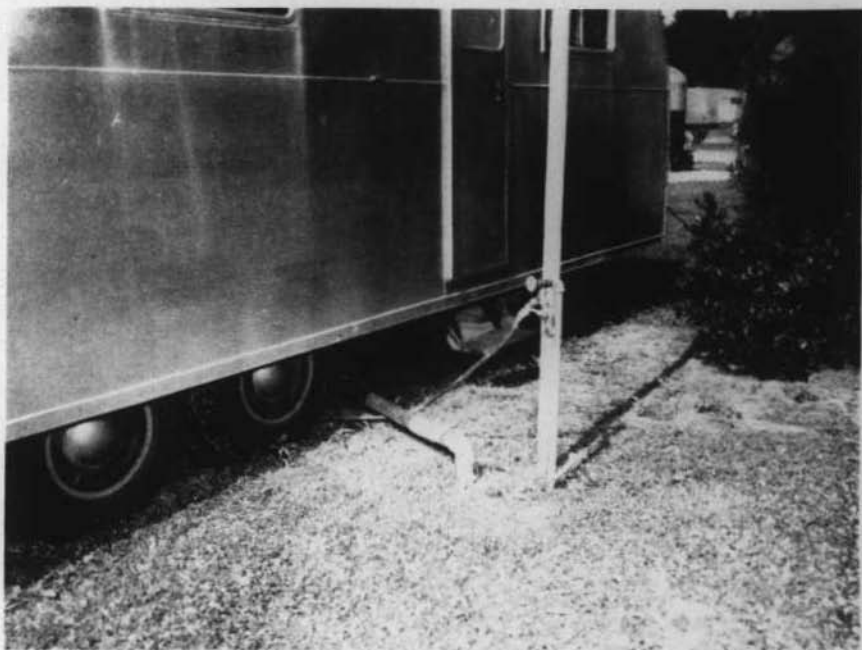
Until 1930, the number of house trailers manufactured was insignificant. Today they are produced at a rate of about 50,000 a year. Most trailer parks started out as small back yard affairs, with no facilities except perhaps an electric extension cord strung out from a nearby house.

Today there are approximately 2,700 licensed trailer parks in Florida. The number is increasing at a rate of about 200 a year, reports the Bureau of Sanitary Engineering of the State Board of Health.

In Florida, trailer parks which rent space only and do not have sleeping accommodations are issued permits by the State Board of Health. Motels come under the jurisdiction of the State Hotel Commission and the State Board of Health, with the two agencies working closely together.

The trend is toward more units in motels, and larger trailer courts. A year ago the average motel contained 15.8 units. Today the figure is 16.2. There are many trailer parks with 100 lots. A few have 1,000. One lot, naturally, accommodates one trailer.

Although they are big business when lumped together, motels and trailer parks are comparatively small enterprises from the standpoint of ownership and individual investment and profit. Many are a husband-wife arrangement, with few, if any, hired helpers. Middle aged couples coming to Florida with a "nest egg" often decide to build or buy a motel or trailer park.



Trailer hooked up to sewer connection, with outside vent.

## ***Pick the Right Spot***

Whether they succeed or fail depends, of course, on the accommodations and service offered. But even more than that, success depends on location.

Which road? Of course, it must be one that is well traveled. Most state road departments, including Florida's, have figures on traffic flow for almost all state roads, and will give this information free to anyone who asks for it. Heavy traffic flow is not the whole answer, but it is a basic requirement.

At what spot on the road should you build? Motels and trailer parks should be placed to catch the motorist as he is ready to stop for the night. Origin and destination surveys can help to find the answer. A tourist will usually travel 300 miles before

looking for overnight accommodations, except in the mountains, or where there are scenic attractions to slow him down. Then the distance may be only about 150 miles, as is the case with many travelers on Florida's East Coast. Between big cities the day's drive may be longer, as much as 440 miles.

The driver should be able to spot the motel or park in time to slow down before reaching the entrance, and to drive into it without fighting traffic. Courts located on the right side of the road as the motorist approaches them have an advantage over those across the highway. It is easier to see a motel or park located near a stop sign, slow sign or curve.

How much competition is already there? It could offset the advantage of heavy traffic and excellent location. Is any new road construction planned in the area that will affect the traffic flow in front of the proposed spot? The State Road Department will tell what its plans are. Is the spot quiet, and capable of being beautified?

## **Basic Considerations**

As necessary as they are unglamorous are the questions about sanitation, especially water supply and sewage disposal. These are the primary concerns of the State Board of Health. Carelessness in planning good sanitation can get a motel or park owner in a lot of trouble. Short cuts now can mean major expenses later.

If at all possible, urges David B. Lee, director of the State Board of Health's Bureau of Sanitary Engineering, hook up with the water and sanitary sewer systems of the nearby city. This is the easiest way out, and the best.

Before erecting a trailer court, the builder must submit his plans for water and sewage disposal systems to his County Health Department for approval. When the court is completed, he must apply for a permit through them also. The County Health Departments work closely with the State Board of Health's Bureau of Sanitary Engineering in supervising trailer parks.

If the solution is not this simple, the operator will have to provide his own facilities.

Getting a safe, clean and adequate water supply will be his Number One job. He must eliminate all possibility of disease spreading through impure drinking water.

Water pressure is important, too, because if it is inadequate, toilets will not operate properly. Neither will automatic washing machines. Chances for contamination are greater, due to negative or low pressures in the water system.

The storage capacity should be great enough to assure an adequate supply of water at ample pressures in all parts of the system. Locate reservoirs above ground-water level, where surface water and underground drainage will flow away from them. Reservoirs should be covered, and overflow pipes turned downward and covered with 24 mesh screen. Fastening manhole covers will prevent unauthorized access. The delivery rate to the pressure tank must be equal to the maximum domestic demand.

Elevated tanks are recommended for constant pressure and delivery rate, for economy of pumping and for a storage supply for fire protection. A ground-level reservoir located on an elevation is usually the least expensive facility for storing water.

Wells should be driven on the highest part of the lot, above every possible source of pollution. Watch out for neighboring sewage disposal units. Drainage or surface runoff must be away from the well site. The sanitarian from the County Health Department can give a lot of good advice, if he is asked. He can locate the well, help in securing a drilling permit and have the raw water checked for possible contamination and for chemical and physical characteristics which may show a need for treating the water to prevent corrosiveness or staining from high iron content.

New wells, storage tanks, reservoirs, distribution systems and water piping should be flushed out, then disinfected with a 50-parts-per-million chlorine solution in accordance with instructions from the local health department.





This trailer park has its own private water tank.

The Bureau of Sanitary Engineering of the State Board of Health has determined that the water supply in trailer courts should be able to supply at least 125 gallons a trailer coach space a day, with a safe figure closer to 200 to 250 gallons for each coach space. The maximum demand for water will greatly exceed the average demand in a trailer court.

A court with 25 spaces would face a demand load of 65 gallons a minute, and one with 300 spaces would require 375.

Piping in the distribution system should be able to supply six to eight gallons a minute at a minimum pressure (20 pounds to the square inch) in each coach space outlet.

Each trailer space should have an individual connection, consisting of a riser terminating at least four inches above the ground surface, with two  $\frac{3}{4}$ -inch valved outlets.

There should be drinking fountains at service buildings and playgrounds.

The motel owner, in planning his water supply, should figure on a very minimum of 50 gallons a person a day. This is for domestic use only, and does not include water for the grounds.

## ***Sewage Disposal***

The installation of a sewer system involves many considerations. Much depends on the type of soil, and the amount of sewage to be disposed of. In North Florida, there may be too much clay. It hasn't much absorption and may prevent a sewage disposal unit from working properly. In Central and South Florida, many areas are underlain with close-to-the-surface layers of hardpan or limestone, or coral rock. This, too, prevents proper absorption. Or the water level in Central and South Florida may be too close to the surface and prevent proper percolation.

There need be no mystery about the type of soil on which an owner plans to build. Sanitarians from Florida's 66 County Health Departments will (on request) run soil log and percolation tests to determine the soil's ability to take water.

Several other factors will influence the selection of a disposal plant. How many people will you accommodate? How near is the stream that will eventually receive the treatment plant effluent? What is this water used for?

Since there are so many angles to sewage disposal, it is best to hire a consulting engineer to draw up plans. The owner and the engineer can get a lot of help from the County Health Department and the State Board of Health.

## **Motel Problems**

Unable to connect to a city sewer system, the motel owner has several other alternatives for getting rid of his sewage satisfactorily.

There is the package sewage treatment plant, consisting of a main collection sewer, followed by secondary treatment units—usually an Imhoff tank. The Imhoff tank serves the dual purpose of removing settleable solids from the sewage and digesting these solids to a harmless state in the bottom compartment of the tank. In a few cases, this primary treatment unit might provide adequate treatment. However, in most cases, a trickling filter and a final settling tank would be required to provide complete treatment.

The above facilities will usually provide the best method of disposal for larger motels.

Another good system involves one large septic tank, with dosing syphons or pumps to discharge the effluent to surface or sub-surface sand filters. With this system you can be sure of proper treatment. The surfaces and filters are easier to maintain, but sometimes sub-surface filters are preferred because they eliminate the possibility of odor nuisance.

If surface filters are used, health authorities recommend the plant be located far enough away from the living area to avoid complaints about the smell. It also should be located on a site large enough to allow for future expansion, which can easily be incorporated into this system. The units can be adapted to courts of any size.

Before erecting a motor court, the builder must get a permit from the State Hotel Commission's supervising architect. The plot plan showing drainage, sewage disposal, water system and other pertinent sanitation specifications must be approved by a District Sanitary Engineer and the State Board of Health.



Approved trailer plumbing has trap under the sink.

## ***Trailer Park Problems***

Many trailer parks, with no city systems to hook up to, are using package sewage treatment units. Experience has taught them how discouraging septic tanks can be.

Grease is the bugaboo. It causes the biggest headaches in sewage disposal because it is hardest to remove.

Trailer folk take their homes with them. This includes their kitchens, and kitchen waste contains a lot of grease. So does laundry waste. That is why some operators of courts using septic tanks want to throw up their hands when the laundry is mentioned. The method of treating laundry waste is very limited,

although there are on the market today two or three "air flotation units" designed for the specific purpose of removing grease. In small installations where septic tanks and absorption beds are used, it is best to keep laundry waste separate from sanitary sewage.

Grease traps are nearly always inadequate. Actually, they remove very little grease. If allowed to pass into subsurface drain fields, or into sand or rock filters, it will clog them up completely in a short time. Emptying untreated laundry waste into a septic tank is very much of a hazard.

In Florida, any County Health Department, or the State Board of Health, will furnish a design for chemical coagulation units to remove grease. They have proved quite satisfactory in the past when maintained properly. Like any good piece of equipment, the units do require a certain amount of maintenance. It is definitely recommended before extensive laundry facilities are installed at a trailer park that the health department sanitarian, or a sanitary engineer, be asked to study the problem.

Accommodating trailers with toilets brings up several new considerations. One involves the fact that the State Sanitary Code requires that septic tanks for systems serving trailers with toilets must provide at least 500 gallons capacity for two trailers and 100 gallons capacity for each additional trailer to be connected to this system.

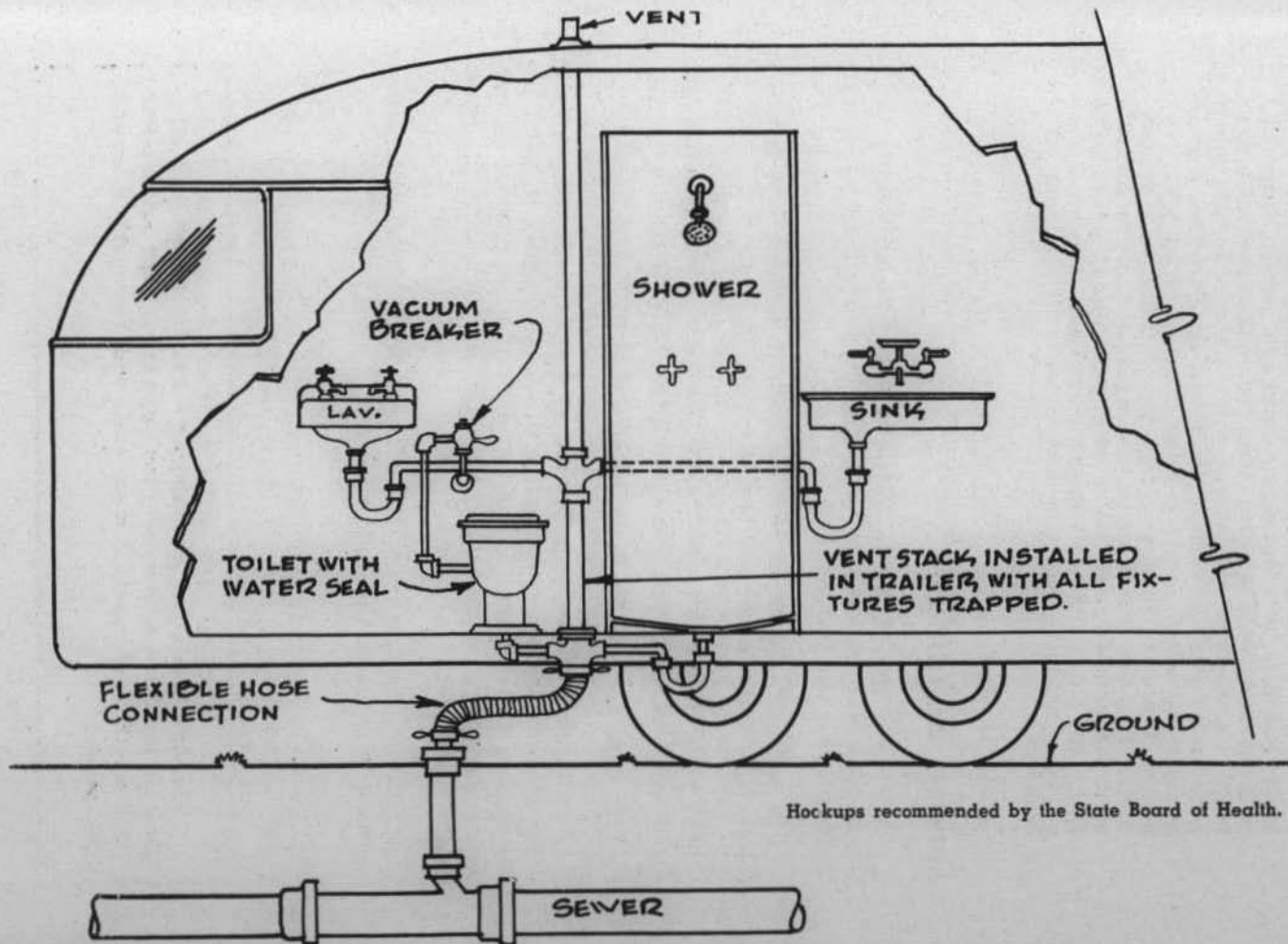
Individual connection to the sewer line also is required.

The U. S. Public Health Service has these recommendations to make for sewer connections:

"Each coach space should be equipped with at least a 3-inch sewer connection, trapped below frost line and reaching at least 4 inches above the surface of the ground. The sewer connection should be protected by a concrete collar, at least 3 inches deep and extending 12 inches from the connection in all directions. The sewer connection should be provided with suitable fittings to permit a watertight junction to be made with the trailer outlet.

"The connection between the coach drain and the sewer should be watertight. It is desirable that this connector be a flexible hose, 2 to 3 inches in diameter and 4 to 5 feet in length. In some cases, when the coach drain is on the curb side of the coach, the connector necessarily will have to be 10 to 15 feet in length.





Hockups recommended by the State Board of Health.

"The hose should be equipped with hose couplings at either or both ends. A threaded connection should be made at the sewer, and either a threaded or a fitted and clamped connection at the coach drain. The sewer outlet should consist of a 3-inch or larger quarter-bend or Y, capped with a standard ferrule with a 3-inch screw plug. The screw plug should be fastened by a chain or other device to the concrete collar surrounding the sewer connection, to prevent its removal from the site while the sewer connection is in use. The threaded hose connection may be connected to the ferrule directly or by use of pipe fittings. However, if temporary pipe connections should be necessary, the 2-inch pipe can be inserted into the ferrule and calked to make an acceptable connection."

## **Service Buildings**

Motels and trailer courts which have toilet and bathing facilities in central units must, according to the Florida State Sanitary Code, provide the following:

For women: one toilet seat for each 15 women, one lavatory for each 20 and one shower bath for each 20.

For men: one toilet seat for each 20 men; one urinal for each 25, one lavatory for each 20, one shower bath for each 20.

This does not include facilities required for employees.

The number of guests is figured at two to each bedroom and three to each trailer, considering the total equally divided between men and women. If the owner limits the number of persons in bedrooms or trailers to a smaller number, then the lesser figure will govern.

In special circumstances, the State Board of Health can either increase or decrease the units required.

Florida's hotels, too, are enjoying a healthy growth and offer some of the finest accommodations anywhere. They are meeting the competition of motels in many areas with reasonable rates and good service.

Here are some other requirements for service buildings:

Toilet seats and lavatories separated from other areas by substantial partition walls, reaching from floor to ceiling.

No toilet door open to a room where there is food.

Separate rest rooms for each sex, and, where Negroes are employed or accommodated, for each color.

Toilet seats separated by partitions. Self-closing doors concealing occupant from outside view.

A screen in the woman's room to prevent view of toilets when the door is open.

Outside ventilation for all toilet rooms, provided at the rate of at least four square feet for the first seat and one square foot for each additional.

Open front seats on all toilets.

Floors washed daily and walls weekly. All fixtures kept clean.

Cool drinking water conveniently accessible to all employees and customers.

Each rest room furnished with soap, preferably liquid, and individual towels, preferably the paper kind. No common towel.

Hard surfaced and well marked and lighted walkways leading to service buildings.

Heating facilities which will maintain temperature of about 70 degrees in cold weather.

Rooms well lighted.

Hot and cold running water available at all times. In trailer courts, the hot water supply should be figured at three gallons per hour per coach space.

A good measurement for shower stalls is 3 x 3 feet. Women appreciate a dressing compartment in connection with their showers, complete with stool and bench.

Many of Florida's trailer courts have installed private bathrooms. The layout provides for the coaches to park immediately adjacent to them. These are rented to trailerites who prefer not to use the central units and can afford the higher rate for private bath.

## **Plumbing in Coaches**

A major development in the trailer industry is the trend toward complete plumbing units in coaches, which has led to the establishment of a national code for trailercoach plumbing. Florida was the first state to put the code in effect, and a growing number of parks are installing the recommended connections.

Trailerites are urged to seek advice of a plumbing inspector before buying a coach or installing plumbing in their present home on wheels. Otherwise, they might buy a unit which does not comply with the law.

It is against the law, of course, to use toilets in trailers while the trailer is in motion or parked along the right of way. In fact, the only time they can be used is when they are properly connected to a sewage system by means of an individual trap discharging into a vent running to the roof of the trailer. Each sanitary fixture in the trailer will have to be independently trapped before discharge into the vent.

If trailers with toilets don't meet the state sanitary requirements, camp owners should refuse to connect them.

It is against the law to empty sanitary receptacles from a trailer coach except into a sewerage system or into a privy of the type approved by the State Board of Health. Trailer camps are required to provide means for emptying and cleaning these receptacles.

## **Laundry Facilities**

Trailer parks and motels must furnish at least one stationary laundry tub with two compartments, connected to the camp sewerage system. There must be hot and cold water. It is recommended that there be one laundry tub for every twenty trailer-coach spaces. Many motels and trailer parks go far beyond the minimum requirements of the Florida State Sanitary Code and provide automatic washers and dryers.

Good lighting is important for laundry rooms. There should be 40-foot-candle illumination on work areas such as washtubs, ironing boards and sorting tables.

## **Garbage and Trash**

Garbage not properly disposed of can create a major nuisance in a hurry. To avoid this happening, cans should be distributed all over the camp. The 20-gallon size is best. Keep them clean, and tightly covered. Use wooden containers only for paper, bottles, tin cans and trash.

In motels, one 20-gallon can is considered sufficient for one apartment unit. In trailer courts, a 20-gallon can for each coach space is adequate. Collection should be made twice a week. Cans will last longer and there will be less spillage if they are placed on special racks, about 12 inches off the ground. They should be located not more than 150 feet from any coach space or motel unit.

If a court operator must dispose of his own refuse, there are three methods he can use. He can burn it, bury it, or haul it to the nearest public disposal plant. Small incinerators, of a size to suit most trailer courts and motels, can be purchased. If garbage is buried, at least 12 inches of compacted earth should cover it.

## **Room with a View**

The aesthetic aspect is not the only reason for cleaning up the grounds. Tidiness greatly discourages mosquitoes, flies and rodents.

Mosquitoes breed in stagnant water, and they can find it in cans, jars, buckets, old tires and many other things that accumulate in an unkept yard. Depressions in the ground where water may collect should be drained and filled. Larvicidal treatment also may be necessary. The County Health Department can recommend the most effective method.

As uncovered garbage accumulates, so do flies. Keep the cans tight. If flies persist, spray the area.

Rats won't stay around a place that offers them no food or shelter. They won't find a place to live if all material such as lumber, pipes and wood is stacked 18 inches above ground, and



nothing left lying around. Storing things under trailers may offer harborage to the rats. All buildings within the courts should be ratproofed, especially those containing food.

Your County Health Department knows a lot about getting rid of rats. Ask them.

A well landscaped lawn, flowers, lawn furniture — all are part of meeting competition, and usually indicate a tidy-minded proprietor.

## **Cleanup Time**

Keeping motel rooms and central buildings in trailer courts clean is a major expense item. But cleanliness is also a major consideration of the customer in rating his accommodations.

Florida's rules and regulations for motels and trailer parks set down the following:

Change linen after each occupancy. Supply sterilized towels and individual soap. Sterilize all drinking glasses and all other containers in bedrooms after each occupancy.

Keep linen rooms, slop sinks and closets clean, neat and orderly.

Every person handling towels or linens or working in any other capacity whereby disease might be communicated must have a health certificate.

It is estimated that for a 35-room court, the cleaning staff should include two maids working eight hours a day, six days a week, and one maid working two days a week, plus one cleaning woman one day a week to completely scour bathrooms and windows. For a 10-room court the cleaning staff should include one maid six days a week and a cleaning woman one day a week.

Room cleaning is a science. University professors have made a study of it and come up with formulas to save steps and time. Prof. Lundberg offers this one:

### Cleaning sequence in a motel room

1. Make bed
2. Clean up loose trash and empty ash trays into waste basket
3. Clean bathroom, doing the floor last
4. Clean venetian blinds
5. Wet mop the floor
6. Arrange furniture, lay rugs and finish off.

This general chronology of work, says the professor, has been used for a number of years. Science has since refined it and each system varies a little, depending on the particular condition of each court.

### ***Something to Join***

Both the trailer court and motel industries have organizations which work on their behalf for better laws, better public relations, thereby consolidating their effort and effectiveness.

There is the Florida Motor Court Association with more than 1,100 members.

Then the Trailer Coach Manufacturers Association, large and influential, operates on a national level. It regularly conducts nationwide park inspections, and only approved trailer parks are listed in its guide. The inspection is based on a rating system of 100 points, awarded for services and facilities, with a total of 60 possible points awarded on cleanliness and appearance of the park in general. The 1953 official Trailer Park Guide lists 593 approved trailer parks in Florida.

Trailerites themselves can join several organizations, including the famous Tin Can Tourists of the World.

On the state level, trailer organizations include the Florida Trailercoach Dealers Association, which has set up a code for dealers, and the Florida Trailer Park Association, recently organized.

## **Rates, Please**

Rates at Florida's trailer parks vary from \$1 to \$1.50 a day, \$3 to \$8 a week, \$10 to \$30 a month. It depends on location and services.

Many Florida motels have one rate for summer and another for winter. It is difficult to quote an average. As an example, however, many motels charge \$8 to \$12 a day in the winter, \$5 to \$6 in the summer.

## **Some Other Problems**

"If you get ten motel owners together," a leader in the industry once remarked, "chances are you will find that the former occupations of all are different." The same is probably true of trailer court owners. Since their backgrounds are so varied, through their organizations they learn how to cope with problems that arise, such as:

- ... To allow dogs or not. Some owners who allow pets restrict them to special walking areas.
- ... What to do with active children. Playgrounds are a big help in controlling them.
- ... Should cabanas (shelters erected at the side of the trailer when it is parked) be allowed? It depends on their appearance and construction, say many park owners.
- ... What if the neighbors don't get along very well together? How do you handle an argument?
- ... How are you going to keep your guests entertained? An absorbing recreation program is about the best solution.

Obviously the motel and trailer park owners are finding the answers to most of their problems because each year finds more and better motels and more and better trailer parks all through our vacation State.

People on the move will find what they are looking for in Florida.

This issue of **HEALTH NOTES** is not a manual for operators. Primarily, its purpose is to give the public and prospective owners and operators an idea of some of the problems, especially in the field of sanitation.

# The State Board of Health

1217 Pearl Street or P. O. Box 210

JACKSONVILLE, FLORIDA

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Acting Governor of Florida

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Paul W. Penningroth, Ph.D.

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All counties in Florida have organized county health departments except  
St. Johns County

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